NO. 24

NORTH DAKOTA
DEPARTMENT OF TRANSPORTATION

REQUEST FOR PROPOSAL

STATE AID PROJECT NOS. SOIB-4-083(102)203 (PCN-18220) and SOIB-4-083(103)203 (PCN-18221)

20.245 Miles

HMA OVERLAY

US 83 FROM MINOT TO MINOT AIR FORCE BASE - NORTHBOUND and US 83 FROM MINOT TO MINOT AIR FORCE BASE - SOUTHBOUND

WARD COUNTY

BID OPENING: The bidder's proposal will be accepted via the Bid Express on-line bidding exchange at www.bidx.com until **09:30AM Central Time on April 08, 2016.**

Prior to submitting a Proposal, the Bidder shall complete all applicable sections and properly execute the Proposal Form in accordance with the specifications.

Proposal Form of:

_____
(Firm Name)

_____
(Address, City, State, Zipcode)

(For official use only)

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Projects: SOIB-4-083(102)203 (PCN-18220) and SOIB-4-083(103)203 (PCN-18221)

The company, firm, corporation, or individual hereby acknowledges that it has designated a responsible person or persons as having the authority to obligate the company, firm, or individual, through electronic or paper submittal, to the terms and conditions described herein and in the contract documents. The designated responsible person submitting this proposal shall be hereafter known as the bidder. By submitting this proposal, the bidder fully accepts and agrees to all the provisions of the proposal. The bidder also certifies that the information given in this proposal is true and the certifications made in this proposal are correct.

The bidder acknowledges that they have thoroughly examined the plans, proposal form, specifications, supplemental specifications, special provisions and agrees that they constitute essential parts of this proposal.

The bidder acknowledges that all line items which contain a quantity shall have a unit price bid. Any line item which is bid lump sum shall contain a lump sum bid price.

The bidder acknowledges that they understand that the quantities of work required by the plans and specifications are approximate only and are subject to increases and decreases; the bidder understands that all quantities of work actually required must be performed and that payment therefore shall be at the prices stipulated herein; that the bidder proposes to timely furnish the specified materials in the quantities required and to furnish the machinery, equipment, labor and expertise necessary to competently complete the proposed work in the time specified.

NON-COLLUSION AND DEBARMENT CERTIFICATION

The bidder certifies that neither he/she, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with this bid.

By submitting this proposal, the bidder certifies to the best of his/her knowledge and belief that he/she and his/her principles:

a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal Department or agency;
b. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or perform a public (Federal, State or Local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records; making false statements; or receiving stolen property

c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or Local) with commission of any of the offenses enumerated in paragraph b. of the certification; and
d. Have not within a three-year period preceding this proposal had one or more public transactions (Federal, State or Local) terminated for cause or default

Where the prospective bidder is unable to certify to any of the statements in this certification, the bidder shall submit an explanation in the blanks provided herein. The explanation will not necessarily result in denial of participation in a contract:

Explanation:_____
_____
_____
_____

If the prequalified bidder's status changes, he/she shall immediately submit a new fully executed non-collusion affidavit and debarment certification with an explanation of the change to the Contract Office prior to submitting the bid.

Failure to furnish a certification or an explanation will be grounds for rejection of a bid.

BID LIMITATION (Optional)

The bidder who desires to bid on more than one project on which bids are to be opened on the same date, and who also desires to avoid receiving an award of more projects than the bidder is equipped to handle, may bid on multiple projects and limit the total amount of work awarded to the bidder on selected projects by completing the "Bid Limitation".

The Bid Limitation must be filled in on each proposal form for which the Bidder desires protection. Each such proposal must be covered by a proposal guaranty.

The bid limitation can be made by declaring the total dollar value of work OR total number of projects a bidder is willing to perform.

The Bidder desires to disqualify all of his/her bids on this bid opening that exceed a total dollar value of

$_____

OR

that exceed a total number of _____ projects.

The Bidder hereby authorizes the Department to determine which bids shall be disqualified.

Projects: SOIB-4-083(102)203 (PCN-18220) and SOIB-4-083(103)203 (PCN-18221)

PERMISSIBLE DISCOUNT (optional)

Only when invited to do so in the Request for Proposal by Special Provision, Bidders are permitted to offer a discount on a specific project (discount project) if they are awarded the contract on one or more additional projects bid at the same bid opening time and date. The bidder must present the proposal so that it can be considered with or without the discount. The bid or discount offered on the "discount project" will not affect the determination of the low bid of any other project.

When discounts are offered, they must be presented as a reduction in the unit price for one or more items of work in the specified proposal (discount project).

Space for Offering Discounts:

_____
_____
_____

Item No:_____

Description:_____

Unit:_____

Proposal Quantity:_____ Unit Price Reduction: $_____ Discount: $_____

Item No:_____

Description:_____

Unit:_____

Proposal Quantity:_____ Unit Price Reduction: $_____ Discount: $_____

Item No:_____

Description:_____

Unit:_____

Proposal Quantity:_____ Unit Price Reduction: $_____ Discount: $_____

Item No:_____

Description:_____

Unit:_____

Proposal Quantity:_____ Unit Price Reduction: $_____ Discount: $_____

TOTAL DISCOUNT_____

It is understood that the discount will only apply if awarded under the conditions as listed above and signed by the bidder.

Projects: SOIB-4-083(102)203 (PCN-18220) and SOIB-4-083(103)203 (PCN-18221)

RECEIPT OF ADDENDA ACKNOWLEDGEMENT

We hereby acknowledge receipt of the following addenda:

Addendum #_____ Dated_____

Addendum #_____ Dated_____

Addendum #_____ Dated_____

Addendum #_____ Dated_____

Addendum #_____ Dated_____

Addendum #_____ Dated_____

PROPOSAL GUARANTY

A proposal guaranty is required. The proposal guaranty must comply with Section 102.09, "Proposal Guarantee" of the Standard Specifications.

TYPE OF PROPOSAL GUARANTY APPLIED TO THIS PROJECT (Check one):

_____ Annual Bid Bond*

_____ Single Project Bid Bond

_____ Certified or Cashier's Check

*Annual Bid Bond is required when submitting proposals electronically

BID ITEMS

Projects: SOIB-4-083(102)203 (PCN-18220) and SOIB-4-083(103)203 (PCN-18221)

Bidder must type or neatly print unit prices in numerals, make extensions for each item, and total. Do not carry unit prices further than three (3) decimal places.

Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						$$$$$	000	$$$$$	00
001	103	0100	CONTRACT BOND	L SUM	1.				
002	216	0100	WATER	M GAL	522.				
003	302	0120	AGGREGATE BASE COURSE CL 5	TON	757.				
004	401	0050	TACK COAT	GAL	45,764.				
005	411	0105	MILLING PAVEMENT SURFACE	SY	5,158.				
006	430	0045	SUPERPAVE FAA 45	TON	78,695.200				
007	430	1000	CORED SAMPLE	EA	240.				
008	430	6428	PG 64-28 ASPHALT CEMENT	TON	4,722.				
009	702	0100	MOBILIZATION	L SUM	1.				
010	704	0100	FLAGGING	MHR	1,000.				
011	704	1000	TRAFFIC CONTROL SIGNS	UNIT	5,042.				
012	704	1052	TYPE III BARRICADE	EA	40.				
013	704	1060	DELINEATOR DRUMS	EA	244.				
014	704	1067	TUBULAR MARKERS	EA	817.				
015	704	1087	SEQUENCING ARROW PANEL-TYPE C	EA	2.				
016	706	0550	BITUMINOUS LABORATORY	EA	1.				

BID ITEMS

Projects: SOIB-4-083(102)203 (PCN-18220) and SOIB-4-083(103)203 (PCN-18221)

Bidder must type or neatly print unit prices in numerals, make extensions for each item, and total. Do not carry unit prices further than three (3) decimal places.

Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						$$$$$	000	$$$$$	00
017	706	0600	CONTRACTOR'S LABORATORY	EA	1.				
018	754	0110	FLAT SHEET FOR SIGNS-TYPE XI REFL SHEETING	SF	30.				
019	754	0206	STEEL GALV POSTS-TELESCOPING PERFORATED TUBE	LF	69.				
020	754	0592	RESET SIGN PANEL	EA	8.				
021	754	0593	RESET SIGN SUPPORT	EA	2.				
022	760	0005	RUMBLE STRIPS - ASPHALT SHOULDER	MILE	36.019				
023	762	0110	EPOXY PVMT MK 4IN LINE-GROOVED	LF	38,220.				
024	762	0113	EPOXY PVMT MK 4IN LINE	LF	212,190.				
025	762	0132	EPOXY PVMT MK 8IN LINE-GROOVED	LF	17,228.				
026	762	0134	EPOXY PVMT MK 12IN LINE-GROOVED	LF	923.				
027	762	0136	EPOXY PVMT MK MESSAGE-GROOVED	SF	2,016.				
028	762	0420	SHORT TERM 4IN LINE-TYPE R	LF	339.				
029	762	0430	SHORT TERM 4IN LINE-TYPE NR	LF	76,440.				
030	762	0434	SHORT TERM 8IN LINE-TYPE NR	LF	34,456.				
031	762	0436	SHORT TERM 24IN LINE-TYPE NR	LF	25.				
032	762	0437	SHORT TERM 12IN LINE-TYPE NR	LF	923.				

BID ITEMS

Projects: SOIB-4-083(102)203 (PCN-18220) and SOIB-4-083(103)203 (PCN-18221)

Bidder must type or neatly print unit prices in numerals, make extensions for each item, and total. Do not carry unit prices further than three (3) decimal places.

Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						$$$$$	000	$$$$$	00
033	**762**	**0442**	**SHORT TERM MESSAGE-TYPE NR**	**SF**	**2,016.**				
			TOTAL SUM BID						

Projects: SOIB-4-083(102)203 (PCN-18220) and SOIB-4-083(103)203 (PCN-18221)

Type of Work: HMA OVERLAY

County: WARD

Length: 20.2450 Miles

TIME FOR COMPLETION:

The undersigned Bidder agrees, if awarded the contract, to prosecute the work with sufficient forces and equipment to complete the contract work within the allowable time specified as follows:

WORKING DAY CONTRACT: **NA** working days are provided. The Department will begin charging working days beginning **NA** or the date work begins on the project site, whichever is earlier.

CALENDAR DAY CONTRACT: **NA** calendar days are provided. The completion date will be determined by adding **NA** calendar days to **NA** or the date work begins on the project site, whichever is earlier.

COMPLETION DATE CONTRACT The project completion date is **10/08/2016**. The Department provides a minimum of **NA** working days. The Department will begin charging working days beginning **NA** or the date work begins on the project site, whichever is earlier.

Projects: SOIB-4-083(102)203 (PCN-18220) and SOIB-4-083(103)203 (PCN-18221)

Type of Work: HMA OVERLAY

County: WARD

Length: 20.2450 Miles

CONTRACT EXECUTION:

The undersigned Bidder agrees, if awarded the contract, to execute the contract form and furnish a contract bond within fifteen calendar days, as determined by NDCC Section 1-02-15, after date of notice of award, in accordance with the provisions of Sections 103.05 and 103.06 of the Standard Specifications.

AFFIDAVIT:

STATE OF _____)
) ss.
COUNTY OF _____)

The undersigned bidder, being duly sworn, does depose and say that they are an authorized representative of _____
CONTRACTOR NAME
of _____ , a
MAILING ADDRESS

☐ Individual ☐ Partnership ☐ Joint Venture ☐ Corporation

and that they have read, understand, acknowledge, and accept the entire proposal form; and that all statements made by said bidder are true and correct.

_____ , TITLE _____
BIDDER MUST SIGN ON THIS LINE

_____
TYPE OR PRINT SIGNATURE ON THIS LINE

Subscribed and sworn to before me this day.

_____
COUNTY

(Seal) _____ _____
STATE DATE

_____
NOTARY PUBLIC

My commission expires _____

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

Job #24, Project No. SOIB-4-083(102)203 & SOIB-4-083(103)203

HMA Overlay

INDEX OF PROVISIONS

NOTICE

TO: All prospective bidders on all North Dakota Department of Transportation Highway Construction Projects.

Contractors moving construction equipment to NDDOT highway construction projects are subject to the Road Restriction Policy with the following modifications:

A. The contractor may purchase up to 10 single trip permits for each NDDOT highway construction project at a cost ranging from $20 to $70 each. These permits must be purchased from the Motor Carrier Division of the Highway Patrol at the central office of the NDDOT in Bismarck, North Dakota.

B. The $1 per mile fee will not be charged for Gross Vehicle Weights (GVW) exceeding 105,500 pounds, 105,500 pounds, and 105,000 pounds for highways Restricted by Legal Weights, 8 Ton, and 7 Ton highways respectively.

C. The $5 per ton per mile fee will be charged only for loads exceeding a GVW of 130,000 pounds, 120,000 pounds, 110,000 pounds and 80,000 pounds for highways Restricted by Legal Weights, 8 Ton, 7 Ton, and 6 Ton highways respectively.

D. The maximum weights per axle for each of the class restrictions still apply. If it is shown that more axles cannot be added, movement may be authorized; however, a $1 per ton per mile fee will be charged for all weight in excess of the restricted axle limits.

E. These construction equipment single trip permits apply to State and US Highways only.

F. The District Engineers and Highway Patrol will select the route of travel.

G. Contractors moving equipment to other than NDDOT highway construction projects are subject to all fees as shown in the Road Restriction Permit Policy.

H. Contractors must call the Highway Patrol prior to movement of all overweight loads on all State and US Highways.

NDDOT ROAD AND VEHICLE RESTRICTIONS Date Revised 05-22-10

ROAD RESTRICTION PERMITS

Permits shall be issued for the movement of non-divisible vehicles and loads on state highways which exceed the weight limits during spring road restrictions. The issuance of permits may be stopped or posted weights changed at any time based on the varying conditions of the roadways. Permits can be obtained from the Highway Patrol.

RESTRUCTION CLASSIFICATIONS WITH ALLOWABLE AXLE WEIGHTS AND GROSS VEHICLE WEIGHTS	PERMIT AND TON/MILE FEES
Highways Restricted by Legal Weight Single Axle -- 20,000 lbs. Tandem Axle -- 34,000 lbs. Triple Axle -- 48,000 lbs. 4 Axles or more -- 15,000 lbs. per axle Gross Vehicle Weight -- 105,500 lbs. Note: The above weights apply to state highways restricted by legal weights, other than interstate highways, in areas where road restrictions are in force. When the gross weight of an axle grouping exceeds 48,000 pounds, the $1 per ton per mile shall apply to all weight in excess of 15,000 pounds per axle.	Permit Fee: $20-$70 per trip Ton Mile Fee: 105,501 lbs. to 130,000 lbs. GVW -- $1 per mile Over 130,000 lbs. GVW – $1 per mile **plus** $5 per ton per mile for that weight exceeding 130,000 lbs. GVW Exceeding axle limits -- $1 per ton per mile
8-Ton: Single Axle -- 16,000 lbs. Tandem Axle -- 32,000 lbs. 3 Axles or more -- 14,000 lbs. per axle Gross Vehicle Weight -- 105,500 lbs.	Permit Fee: $20-$70 per trip Ton Mile Fee: 105,501 lbs. to 120,000 lbs. GVW -- $1 per mile Over 120,000 lbs. GVW – $1 per mile **plus** $5 per ton per mile for that weight exceeding 120,000 lbs. GVW Exceeding restricted axle limits -- $1 per ton per mile
7-Ton: Single Axle -- 14,000 lbs. Tandem Axle -- 28,000 lbs. 3 Axles or more -- 12,000 lbs. per axle Gross Vehicle Weight -- 105,500 lbs.	Permit Fee: $20-$70 per trip Ton Mile Fee: 105,500 lbs. to 110,000 lbs. GVW -- $1 per mile Over 110,000 lbs. GVW – $1 per mile **plus** $5 per ton per mile for that weight exceeding 110,000 lbs. GVW Exceeding restricted axle limits -- $1 per ton per mile
6-Ton: Single Axle -- 12,000 lbs. Tandem Axle -- 24,000 lbs. 3 Axles or more -- 10,000 lbs. per axle Gross Vehicle Weight -- 80,000 lbs.	Permit Fee: $20-$70 per trip Ton Mile Fee: $5 per ton per mile for all weight exceeding 80,000 lbs. GVW Exceeding restricted axle limits -- $1 per ton per mile
5-Ton: Single Axle -- 10,000 lbs. Tandem Axle -- 20,000 lbs. 3 Axles or more -- 10,000 lbs. per axle Gross Vehicle Weight -- 80,000 lbs.	No overweight movement allowed

SINGLE UNIT FIXED LOAD VEHICLES SUCH AS TRUCK CRANES AND WORKOVER RIGS

A. Permit Fee and Ton Mile Fee for Self-Propelled Fixed Load Vehicles.

1. Permit Fee: $25 per trip

2. $1 per ton per mile for all weight in excess of restricted axle limits or in excess of legal limits on state highways in areas where road restrictions are in force. When the gross weight of an axle grouping exceeds 48,000 pounds, the $1 per ton per mile shall apply to all weight in excess of 15,000 pounds per axle (see weight classification chart in section C.)

3. $5 **per ton per mile** for all movements exceeding the following gross vehicle weight limits:

    a. 105,500 lbs. GVW on unrestricted state highways, other than interstate highways, in areas where road restrictions are in force.
    b. 105,500 lbs. GVW on 8-ton highways.
    c. 105,500 lbs. GVW on 7-ton highways.
    d. 80,000 lbs. GVW on 6-ton highways.
    e. No overweight movement allowed on 5-ton highways

B. Permit Fees for Work-Over Rigs and Special Mobile Equipment Exceeding 650 but not 670 Pounds Per Inch Width of Tire.

1. Permit Fee:
    a. $50 per trip on work-over rigs up to 650 pounds per inch width.
    b. $75 per trip on work-over rigs that exceed 650 but not 670 pounds per inch width of tire.
2. The work-over rig shall be stripped to the most minimum weights.
3. A minimal number of state highway miles shall be used.
4. District engineer approval shall be obtained prior to movement when vehicle exceeds restricted axle weights by more than 5,000 pounds.
5. A validation number ending in TM must be obtained from the Highway Patrol prior to using a self-issue single trip movement approval form.
6. The ton mile shall be waived.

CERTIFICATION

I hereby certify the attached supplemental specifications effective on October 1, 2015.

/S/ — 6/1/15

Bob Fode, P.E., Director
Office of Project Development

Date

NDDOT
North Dakota
Department of Transportation

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION
SUPPLEMENTAL SPECIFICATION
REVISIONS

Effective Date: 10/01/2015

The following specifications are supplementary to the 2014 Edition of the *Standard Specifications for Road and Bridge Construction* as they apply to this Contract. Page references in this document apply to the hard bound, printed edition of the specifications (the "blue book") and the "as printed" version of the specifications on the Department's website.

101.03 ABBREVIATIONS **PAGE 8** **10/01/15**

Delete the line for "ACPA American Concrete Precast Association" and replace it with the following:

ACPA	American Concrete Pipe Association

Add the following item to Section 101.03:

NPCA	National Precast Concrete Association
SWPPP	Storm Water Pollution Prevention Plan

101.04 DEFINITIONS **PAGE 10** **10/01/15**

Delete the definition for "Sieve" and replace it with the following:

Sieve. U.S.A. Standard Sieve, as defined in ASTM E 11. The specified percent passing for each sieve is measured by weight.

104.02 C Significant Changes to the Character of Work **PAGE 34** **10/01/15**

Delete the following paragraph in its entirety:

If the Contractor believes an alteration in the work is a significant change that necessitates a contract revision, the Contractor shall notify the Engineer in accordance with Section 104.03, "Contractor Requested Contract Revisions".

104.05 A Submission of the Claim **PAGE 37** **10/01/15**

Replace the fourth paragraph of Section 104.05 with the following:

Provide a claim submittal to the Engineer that contains, at a minimum, the following information for each claim issue included on the *Notice of Intention to File a Claim* (SFN 16743). Failure to supply the following information for each claim issue constitutes a waiver of claim for addional compensation for each submitted claim item.

105.03 B Scheduling **PAGE 45** **10/01/15**

Replace Section 105.03 B with the following:

B. Scheduling.

1. General.
In order to minimize interference with traffic operations, the Contractor, Engineer, and utility owner shall agree to a detailed schedule before starting work.

2. Utility Coordination Meeting.
If the contract requires a utility coordination meeting, arrange the meeting with the utility owners and the Engineer to occur no later than two weeks after the notice to proceed. At the meeting, provide an agenda and a tentative construction schedule for planning utility relocations and adjustments; after the meeting, publish minutes and distribute a copy to all meeting attendees.

106.02 D Aggregate Source Limitations **PAGE 58** **10/01/15**

Delete number 8 and replace it with the following:

8. In Stark County, within the 2-mile radius from the center of Section 30-137-92;

Delete number 11 and replace it with the following:

11. In Hettinger County, within the 1-mile radius from the center of Section 28-135-91;

107.17 REMOVED MATERIAL **PAGE 80** **10/01/15**

Replace Section 107.17 with the following:

107.17 REMOVED MATERIAL
Unless otherwise designated in the contract, removed material becomes the property of the Contractor.

If the Contractor determines that the material will be disposed of, the material must be disposed in one of the following ways:

A. Dispose of the material through a beneficial use. Apply for a beneficial use permit from the NDDoH by completing an *NDDOT Projects-Inert Waste Beneficial Use Application* (SFN 58981). Provide the Engineer with copies of all documents submitted to the NDDoH.

B. Dispose of the material at an approved permanent waste management facility.

C. If waste cannot be reasonably managed at a permanent waste management facility, obtain approval from the NDDoH for a variance to dispose of the inert waste at another site. Apply for a variance by completing an *NDDOT Projects-Inert Waste Disposal Variance Application* (SFN 54344). Provide the Engineer with copies of all documents submitted to the NDDoH.

   Obtain locations of permanent waste facilities, applications, and guidelines from the NDDoH, Division of Waste Management. View a list of municipal and inert waste landfills and review guidance on the NDDoH website: http://www.ndhealth.gov.

Include the cost of material disposal in the contract unit price of the relevant contract item.

108.03 D Measurement and Payment **PAGE 91** **10/01/15**

Replace Table 108-01 with the following:

Table 108-01
CPM Schedule Price Reductions

Days Late Submitting Update Schedule	Percentage Price Reduction to the Prorated Amount[1]
1	20
2	40
3	60
4	80
5	100

[1] The "prorated amount" is equivalent to the amount calculated for each update schedule submission in Section 108.03 D, Item 2.

108.06 B.1 General **PAGE 93** **10/01/15**

Replace the 6th paragraph of Section 108.06 B.1 with the following:

The Contractor's plea that the contract time was insufficient is not a valid reason for an extension of time. For calendar day and completion date contracts, the Department will not extend the contract time for delays encountered on holidays and during the period from November 15 to April 15. When the time as extended by the Department falls on a date that is a holiday, the Engineer will extend the contract time to the next business day.

109.01 J.2.b Computerized Loader Bucket Scales **PAGE 103** **10/01/15**

Delete the first paragraph and replace with the following:

Loader bucket scales may be used to weigh materials when the quantity of material included in the bid item list is less than 10,000 tons and for aggregates specified under Sections 420 "Bituminous Seal Coat", 421 "Microsurfacing", and 422 "Slurry Seal" regardless of quantity.

109.01 J.4.b(2) Hopper or Batch Scales **PAGE 105** **10/01/15**

Replace Section 109.01 J.4.b(2) with the following:

After the material has been weighed on the project scale and placed in a truck, weigh the loaded truck on a certified scale owned and operated by an entity other than the Contractor. Provide the tare weight of the truck along with the comparison weigh ticket.

109.01 J.6.a General **PAGE 106** **10/01/15**

Delete the second paragraph and replace with the following:

Document the weight of each load on a separate, sequentially numbered weigh ticket that has a maximum size of 5.5 × 8.5 inches. Provide one copy to the driver of the truck. The truck driver shall deliver the weigh ticket to the Engineer at the location where the material is incorporated into the work. The Engineer will reject loads that are not accompanied by a legible weigh ticket.

155.03 A.3 Water Measuring **PAGE 143** **10/01/15**

Replace the second paragraph in Section 155.03 A.3 with the following:

Use a water measuring system that:

- Delivers the designated quantity of water for each batch within the tolerance specified in Section 802.03 B.4, “Batching Water”;
- Automatically stops the water flow when the designated quantity has been delivered; and
- Is adjustable and has a calibrated indicator showing the quantity of water measured for each batch.

155.07 D Bridge Deck Overlay Finishing Machines **PAGE 147** **10/01/15**

Replace Section 155.07 D with the following:

D. Bridge Deck Overlays Finishing Equipment.

Use a finishing machine that is:

- Equipped with an oscillating screed or screeds with an effective weight of at least 75 pounds for each square foot of bottom face area, and provided with positive control of vertical position, the angle of tilt, and the shape of the crown. At least one oscillating screed shall be capable of consolidating the concrete to the specified density;
- Long enough to uniformly strike off and consolidate the width of lane to be paved
- Capable of forward and reverse motion under positive control;
- Travelling on rails with fully-adjustable and stable supports;
- Supported without the use of shims; and
- Not anchored to the concrete using powder actuated fasteners, unless that concrete will be subsequently overlaid.

203.02 EQUIPMENT **PAGE 163** **10/01/15**

Replace the equipment list in Section 203.02 with the following:

Equipment	**Section**
Vibratory Sheepsfoot/Pad Foot/Extended Pad Foot Rollers	151.01 E

203.04 B.1 Topsoil - Wetland **PAGE 165** **10/01/15**

Replace the second paragraph of Section 203.04 B.1 with the following:

Spread a minimum of 6 inches of wetland topsoil at mitigation sites and temporary wetland impact areas.

203.04 C Subcut **PAGE 165** **10/01/15**

Add the following paragraph to the end of Section 203.04 C:

Dispose of material removed from the subcut area as specified in Section 107.17, “Removed Material”.

216.06 Basis of Payment **PAGE 175** **10/01/15**

Replace Section 216.06 with the following:

Pay Item	Pay Unit
Water	M Gal

An “M Gal” is equivalent to 1,000 gallons.

Such payment is full compensation for furnishing all materials, equipment, labor, and incidentals to complete the work as specified.

251.03 D Seed Class **PAGE 182** **10/01/15**

Add the following footnote to Table 251-01:

[1] Substitute Thickspike or Stream bank Wheatgrass of the Critana, Banstock, Sodar, AC Polar or Elbee variety if Sideoats Grama is unavailable.

253.03 C Straw Mulch **PAGE 188** **10/01/15**

Delete the following sentence from this section:

At least 50 percent of the mulch by weight must be at least 8 inches in length.

262.04 A Installation **PAGE 201** **10/01/15**

Replace the first paragraph of Section 262.04 A with the following:

Attach anchor lines to the flotation device.

265.06 Basis of Payment **PAGE 204** **10/01/15**

Replace the first paragraph after the list of pay items with the following:

Include the cost for pipe, geosynthetic material, topsoil, and seed in the price bid for “Stabilized Construction Access”.

302.03 MATERIALS **PAGE 209** **10/01/15**

Replace table in Section 302.03 with the following:

Material	Section
Aggregates	816
Salvaged Base Course	817
Traffic Service Aggregate	816 Class 5; or 817

302.04 A.2 Gradation **PAGE 209** **10/01/15**

Replace the first paragraph in Section 302.04 A.2 with the following:

The Engineer will collect three samples for each 1,000 tons of material placed, except when more than 1,000 tons are placed in a day. If more than 1,000 tons are placed in a day, the Engineer will collect three samples for that day's placement. If the aggregate fails to meet the specified gradation, the Engineer will apply a price reduction as specified in Section 302.06 B, "Contract Price Adjustments".

302.04 C Surface Tolerance **PAGE 210** **10/01/15**

Replace Section 302.04 C with the following:

C. Surface Tolerance.
Unless one of the following surface tolerances is specified, construct the surface to within 0.08 feet of the proposed elevation.

1. Surface Tolerance Type B.
Use trimming equipment, including motor graders, equipped with automatic grade control to adjust for the cross slope and longitudinal profile. Construct the finished surface to within 0.04 feet of the proposed elevation.

Reincorporate material removed from high points during trimming into other portions of the base.

2. Surface Tolerance Type C.
Use roadbed planers to construct the finished surface. The Engineer will allow the base or surface course to be used as the grade reference when trimming shoulders. Construct the finished surface to within 0.04 feet of the proposed elevation.

Reincorporate material removed from high points during trimming into other portions of the base.

306.04 A.1 Gradation **PAGE 213** **10/01/15**

Replace the first paragraph in Section 306.04 A.1 with the following:

The Engineer will collect three samples for each 1,000 tons of material placed, except when more than 1,000 tons are placed in a day. If more than 1,000 tons are placed in a day, the Engineer will collect three samples for that day's placement. If the aggregate fails to meet the specified gradation, the Engineer will apply a price reduction as specified in Section 302.06 B, "Contract Price Adjustments".

401.03 B Tack Coat and Fog Seal. **PAGE 221** **10/01/15**

Delete Section 401.03 B and add the following:

B. Tack Coat.
Use a material from Table 401-01.

Table 401-01

Material	Section
SS-1h	818.02 F
MS-1	818.02 F
CSS-1h	818.02 E.1

When MS-1 is used it may be diluted by the supplier or the Contractor.

C. Fog Seal.
Use a material from Table 401-02.

Table 401-02

Material	Section
SS-1h	818.02 F
CSS-1h	818.02 E.1

401.04 A Application of Bitumen **PAGE 221** **10/01/15**

Delete Section 401.04 A and add the following:

A. Application of Bitumen.

1. General.
Prepare the surface by removing loose dirt and deleterious material.

Provide the Engineer with the manufacturer recommended application temperature ranges. During application, maintain the temperature of bitumen within the ranges recommended by the manufacturer.

Apply bitumen with a distributor on a compacted and stable surface. Use hand sprayers to cover irregular areas. Completely cover the area receiving the bitumen application.

If applying bitumen in multiple passes, overlap the bitumen along adjoining edges of the passes.

Protect the surfaces of structures and other roadway appurtenances against tracking and splattering.

2. Prime Coat.
Apply prime coat when the ambient air temperature is at least 40°F.

Allow the prime coat to cure a minimum of 48 hours before placing pavement.

3. Tack Coat.
Apply tack coat when the air temperature and existing mat temperature are at least 35°F.

Apply tack coat to a dry surface.

Allow tack coat to cure before applying surfacing material.

4. Fog Coat.
Apply fog coat when the ambient air temperature is at least 40°F.

Apply fog coat to a dry surface.

420.04 A General **PAGE 224** **10/01/15**

Replace Section 420.04 A with the following:

A. General.
Do not start seal work after September 1.

Allow material to cure as shown in Table 420-01 before applying seal coat materials.

Table 420-01
Curing Period

Material Type	Curing Period
Prime Coat	4 days
Asphalt Cement Pavements	7 days
Emulsion Pavements	15 days

Schedule the work so that the last bitumen application of the day is sufficiently cured to allow installation of the short-term pavement marking before sunset.

420.04 D Cover Coat Material Application **PAGE 225** **10/01/15**

Replace the third paragraph with the following:

Within one minute following the application of the bitumen, spread the cover coat material uniformly over the bituminous material with an aggregate spreader. Apply cover material by hand to areas that are inaccessible to the aggregate spreader.

420.04 D Cover Coat Material Application **PAGE 225** **10/01/15**

Delete the eighth paragraph in its entirety.

430.03 F Commercial Grade Asphalt **PAGE 238** **10/01/15**

Replace the second paragraph of Section 430.03 F with the following:

The requirements of the following sections will not be applied to commercial grade asphalt:
- Section 430.04 A, “Contractor Quality Control Plan”;
- Section 430.04 B, “Engineer’s Quality Assurance Plan”;
- Section 430.04 C.2, “Determination of Specific Gravity”;
- Section 430.04 E, “QC Testing”; and
- Section 430.04 M, “Acceptance”.

430.04 D.1 General **PAGE 241** **10/01/15**

Replace the third paragraph of Section 430.04 D.1 with the following:

Submit the mix design a minimum of 10 calendar days before beginning paving operations. The Engineer will review the mix design. If the Engineer does not approve the mix design, revise the mix design and submit the revised mix design. Allow 10 calendar days for the Engineer to review a revised mix design before beginning paving operations.

430.04 D.2 Items to be Submitted **PAGE 242** **10/01/15**

Add the following item to Section 430.04 D.2:

e. If the mix contains RAP, submit a 50 pound sample of the milled material.

430.04 F Surface Preparation **PAGE 246** **10/01/15**

Replace the second paragraph of Section 430.04 F with the following:

Correct local irregularities in the existing surface before placing the first lift of bituminous material. If milling is specified, correct local irregularities after milling. Apply a tack coat to the surface before correcting the irregularities. Use the same type of mix that is required for the subsequent lift Use a pneumatic roller as specified in Section 151.01 A.3. “Self-Propelled Pnuematic-Tired Roller” to compact the mix.

430.04 G Patching **PAGE 247** **10/01/15**

Replace Section 430.04 G with the following:

G. Patching.
Remove existing broken or unstable surface material and replace that material with the same mixture specified for the next course.

Place the bituminous material in lifts not to exceed 3 inches and compact the material. Allow the patch material to cool to 130°F before placing additional material. If patching is required during the paving operation, allow the patch material to cool to 185°F before placing additional material.

430.04 H.1 General **PAGE 248** **10/01/15**

Delete the ninth paragraph of Section 430.04 H.1

430.04 I.3.c Intermediate Rolling **PAGE 250** **10/01/15**

Replace the second paragraph of Section 430.04 I.3.c with the following:

If roller tires pick up the bituminous material or there are excessive roller marks in the mat, the Engineer may allow the removal of the intermediate rolling operation if it appears to the Engineer that compaction is being achieved.

430.04 J Joints **PAGE 250** **10/01/15**

Replace Section 430.04 J with the following:

J. Joints.

1. General.
Place pavement against the surface of curbing, gutters, manholes, and similar structures uniformly near the contact surfaces so the pavement is slightly higher than the edge of the structure after compaction. Do not construct a joint on top of a joint from a previous lift.

2. Longitudinal Joints.
Construct longitudinal joints on successive lifts between 6 and 12 inches from the previous longitudinal joint.

Place and follow markings to guide the paver. Construct joints in a uniform line. Correct pavement edges that deviate from the uniform line and correct areas of the joint that vary from the intended location of the joint by more than 2 inches. Construct joints with tight seams and no visible segregation.

3. Transverse Joints.
Construct transverse joints on successive lifts a minimum of 12 feet from the previous transverse joint.

550.03 Materials **PAGE 261** **10/01/15**

Add the following to Section 550.03:

Develop a mix design with a maximum water-cement ratio of 0.40 when placing concrete with a slip form paving machine. Use the water-cement ratio shown in Section 802.01 B.2, “Concrete Class Designation” for all other paving methods.

550.04 H.1.d Final Surface Finish **PAGE 268** **10/01/15**

Replace Section 550.04 H.1.d with the following:

d. Final Surface Finish.

(1) General.
Uniformly texture the surface by dragging a seamless strip of stiff-fiber artificial grass carpet longitudinally along the full width of the pavement in a single pass.

Use and maintain a taut string line for operating the carpet drag. Attach the leading edge of the carpet drag to a bridge. If the Engineer determines it is not feasible to use a bridge or string line, other texturing methods will be allowed.

Maintain a clean carpet free of encrusted concrete.

Provide a minimum texture depth of 0.031 inches.

(2) Roadways with Speed Limits Less than 45 MPH.
The Engineer will test the texture achieved by the carpet drag in accordance with ASTM E 965 and the Field Sampling and Testing Manual. The Engineer will determine the test location.

If three or more lots have texture depths less than 0.031 inches but greater than or equal to 0.025 inches, perform diamond grinding on those lots.

Perform diamond grinding any lot having a texture depth of less than 0.025 inches.

Perform grinding as specified in Section 550.04 M.4, “Grinding.”

The Engineer will determine the limits of any failing test by running additional tests at 100 foot intervals before and after the failing test. The Engineer will determine the location of the additional tests.

(3) Roadways with Speed Limits 45 MPH or Greater.
Run a clean, metal tine longitudinally along the surface immediately following the carpet drag. Exclude areas within 3 inches of the edge of the slab and longitudinal joints. Run the tine continuously across transverse joints.

Use a tine that provides:
- 1/8 inch ±1/64 inch groove width;
- 3/16 inch ±1/16 inch groove depth; and
- 3/4 inch spacing of between grooves.

If the concrete has becomes too stiff to receive the metal tine finish, use diamond bladed equipment to produce the longitudinal grooves.

550.04 I.3 Impervious Membrane Cure **PAGE 271** **10/01/15**

Replace the first paragraph of Section 550.04 I.3 with the following:

Use a curing compound that meets the requirements of Section 810.01 B.2, “Type 2, Class B”.

570.03 A General **PAGE 281** **10/01/15**

Add the following item to the table:

Impervious Membrane Cure	810.01 B.1

570.03 B.2.a Concrete **PAGE 281** **10/01/15**

Replace Section 570.03 B.2.a with the following:

a. Concrete.
Use Class AE concrete with cement that meets the requirements of AASHTO M 85, Type I or Type IA for spall repairs.

570.03 D Curing Compound **PAGE 281** **10/01/15**

Delete Section 570.03 D.

570.04 A.1.b Full Depth Repairs **PAGE 282** **10/01/15**

Replace Section 570.04 A.1.b with the following:

b. Full Depth Repairs.
Use the lift out method to remove concrete in full depth repair areas with minimal disruption to the subgrade and without damage to the remaining concrete. Do not operate equipment, other than compaction equipment, in areas where concrete has been removed. Fill voids deeper than 1 inch with aggregate and compact the material to the level of the existing subgrade.

Place concrete for repairs less than 100 feet long the same day that removals are initiated. Place concrete for repairs longer than 100 feet within 48 hours of initiating removals. Dampen the faces of existing concrete before placing new concrete.

Place, consolidate, finish, and cure concrete according to the following portions of Section 550.04, “Construction Requirements”:

- 550.04 C, “Roadbed Condition”;
- 550.04 D, “Placing and Spreading Concrete”;
- 550.04 E, “Placing Reinforcing Steel and Tie Bars”;
- 550.04 F, “Uncontrolled Cracking”;
- 550.04 G, “Joints”;
- 550.04 H, “Finishing Concrete”, except parts 1.d, “Final Surface Finish” and 1.e, “Imprinting Pavement”;
- 550.04 J, “Removing Forms”;
- 550.04 K, “Sealing Joints”; and
- 550.04 L, “Opening to Traffic”.

Provide finished concrete that is flush with all adjacent pavement surfaces. Before the concrete sets, check the repair utilizing a 10 foot straight edge and correct areas that deviate by 1/8 inch or greater.

Texture the repair by dragging a carpet of artificial grass longitudinally over the repaired area.

If repairs involve multiple lanes, fill the gap between the lane under repair and the existing concrete with cold bituminous material. Remove this material before making the repair to the adjacent lane.

(1) Repairs One Lane Wide.
Use a bond breaker along the centerline joint. Tie bars are not required on repairs that are one lane wide.

When the repair falls in a ramp, restore the longitudinal joints crossing the repair, but do not use tie bars.

(2) Repairs Wider Than One Lane.
Before placing the concrete in the second lane, install 30 inch #5 tie bars in the longitudianl joint using the original tie bar pattern. Drill holes for the bars and secure the bars in the holes using epoxy.

(3) Impervious Membrane Cure.
Use a curing compound that meets the requirements of Section 810.01 B.1, “Type 2”.

Apply the cure at a minimum rate of 1 gallon per 150 square feet of pavement in one or two applications. If applying two coats, apply the second application within 30 minutes of the first application.

Protect joints that require sealing from infiltration of the curing compound.

Immediately cover the exposed sides of the concrete pavement with curing compound if removing forms exposes curing concrete before the expiration of the curing period.

Immediately reapply curing compound to damaged areas within the curing period.

570.04 A.2.c Dowel Bars **PAGE 284** **10/01/15**

Replace the first paragraph of Section 570.04 A.2.c with the following:

Drill 1-3/8 inch diameter holes using a rigid frame-mounted drill. Clean the hole, inject epoxy into the hole, and insert dowels.

570.04 A.3.a Concrete Removal **PAGE 285** **10/01/15**

Replace the third paragraph of Section 570.04 A.3.a with the following:

If existing reinforcing steel is damaged or bent within the 18 inch lap area, replace the damaged reinforcing steel.

570.04 C Grinding **PAGE 285** **10/01/15**

Replace the first paragraph of Section 570.04 C with the following:

Allow new concrete and dowel bar retrofit patch material to cure for a minimum of 24 hours before grinding.

570.04 C.6 Slurry Removal **PAGE 286** **10/01/15**

Replace Section 570.04 C.6 with the following:

6. Slurry Removal.
Continuously collect all slurry or residue resulting from the grinding operation.

In areas with speed limits of 45 mph or less and in areas with curb and gutter, dispose of slurry as specified in Section 107.17, “Removed Material”.

In areas with speeds greater than 45 mph and without curb and gutter, slurry may be place on the foreslope of the roadway. Prevent slurry from entering pipes, culverts, storm drains, ravines, streams, waterways, wetlands, and all other water conveyances. Install erosion control features as necessary to prevent contamination, or dispose of slurry as specified in Section 107.17, “Removed Material”.

570.06 BASIS OF PAYMENT **PAGE 289** **10/01/15**

Delete the following paragraph from Section 570.06:

Include all costs for saw cuts, steel reinforcing, bar supports, tie bars, and joint sealing in the unit price bid for "__Inch Concrete Pavement Repair - Full-Depth _____".

602.04 J Penetrating Water Repellent Treatment of Concrete Surfaces **PAGE 307** **10/01/15**

Replace section 602.04 J with the following:

J. Penetrating Water Repellent Treatment.
Apply penetrating water repellant to the driving surface of the bridge deck after barrier forms have been removed.

Before treating the deck, use sandblasting or water washing equipment to clean the surfaces of material that might inhibit the coverage and penetration of the solution.

Prepare the deck by applying pre-treatment cleaning agents before the use of water washing cleansing methods. Add detergent to the cleansing water, if necessary. After washing, rinse with clear water.

Use solvents and hand tools to remove bonded foreign materials.

Use a cleaning process that does not remove or alter the existing deck finish and does not expose the coarse aggregate.

Before treatment, allow the deck to dry to meet the requirements of the repellent manufacturer.

Apply penetrating water repellent treatment solution when the air or concrete surface temperature is 40°F and rising. Use airless application equipment with 15 to 40 psi application pressure. Apply treatment solution at the rate recommended by the solution manufacturer.

602.04 K.1 General **PAGE 307** **10/01/15**

Replace Section 602.04 K.1 with the following:

1. General.
When shown in the plans, apply membrane and primer in dry weather and when the air temperature is above 40°F. Apply to surfaces that are dry, clean, free of sharp protrusions and above 40°F.

604.03 B.3 Trial Mix **PAGE 310** **10/01/15**

Replace the "AASHTO T 23" test requirement with "ND T 23:

604.03 E.1 Concrete **PAGE 310** **10/01/15**

Replace the "AASHTO T 23" test requirement with "ND T 23:

606.04 A Design and Manufacture **PAGE 314** **10/01/15**

Replace the second paragraph in Section 602.04 A with the following:

Use an ACPA or NPCA certified plant in the construction.

702.06 Basis of Payment **PAGE 355** **10/01/15**

Replace the Table 702-01 with the following:

Table 702-01

Payment for Mobilization

Original Contract Amount Earned	Payment will be the Lesser of:	
	Mobilization Bid Amount	Original Contract Amount
5%	25%	2.5%
10%	50%	5.0%
50%	100%	7.5%
75%	100%	10.0%

704.04 B Traffic Control Device Condition Classifications **PAGE 359** **10/01/15**

Replace all instances of “ATSAA” in Section 704.04 B with “ATSSA”.

704.04 M Protection Vehicle with Truck Mounted Attenuation Device (TMA) **PAGE 366** **10/01/15**

Replace the last paragraph of 704.04 M with the following:

Equip the protection vehicle with an advance warning flashing or sequencing arrow panel conforming to Section 704.03 M, “Advance Warning Flasher or Sequencing Arrow Panel” and the MUTCD.

704.04 O Traffic Control for Uneven Pavement **PAGE 367** **10/01/15**

Replace all instances of “Sign W20-52-24” in Section 704.04 O with “W20-52-54”.

Change the title of Section 704.04 O.3.b to “Uneven Pavement Greater Than 2 Inches.”

706.02 B Aggregate Laboratory **PAGE 372** **10/01/15**

Replace Section 706.02 B with the following:

B. Aggregate Laboratory.
Place the laboratory at a location acceptable to the Engineer. The Engineer will have the full control and the exclusive use of the laboratory.

Provide a laboratory with a minimum floor area of 230 square feet, minimum exterior width of 8 feet, and a minimum ceiling height of 7 feet.

Partition the building into a minimum of two rooms, a smaller room having a floor area of approximately 70 square feet.

Provide a workbench with a length of 7 feet in the smaller room:

Provide the following equipment in the larger room:

1. Mechanical shaker capable of receiving 6 trays that have a screen size of 14 inches by 14 inches and the following compatible sieves:
   - 1-1/2 inch;
   - 1-1/4 inch;
   - 1 inch;
   - 3/4 inch;
   - 1/2 inch;
   - 3/8 inch;
   - No. 4; and
   - An enclosed dust pan.
2. Mary Ann shaker capable of being adjusted to receive 8 and 12 inch diameter sieves;
3. Splitter with a maximum hopper capacity of 0.6 cubic feet;
4. Splitter with a minimum hopper capacity of 1.0 cubic feet; and
5. An exhaust fan capable of changing the air in the room every minute.

709.04 C Geosynthetic Geogrid (Type G) **PAGE 376** **10/01/15**

Replace Section 709.04 C with the following:

C. Geosynthetic Geogrid (Type G).

Unroll geogrid parallel to the centerline of the road. Do not drag the geogrid across the underlying material. Use geogrid widths that produce overlaps of parallel rolls at the centerline and at the shoulders and so that no overlaps are required along wheel paths.

Overlap geogrid a minimum of 30 inches at all splices and joints when placing on subgrade. Overlap geogrid a minimum of 12 inches at all splices and joints when placing on base.

Construct overlaps at the end of a roll so the previous roll laps over the subsequent roll in the direction of the cover material placement. Mechanically tie transverse joints to maintain the minimum overlap. Place pins, staples, or small piles of aggregate to maintain the geogrid position before placement of cover material.

Stagger end overlaps at least 10 feet from other end overlaps in parallel rolls. Cut or increase overlaps to conform to curves.

Patch damaged areas of geogrid. Place a patch that overlaps the damaged area by 36 inches on all sides. Mechanically tie the patch to the underlying grid.

Place the first lift of material over geogrid installed on subgrade to a depth of 10 inches of loose material. Place the first lift of material over geogrid installed on base to a depth of 6 inches of loose material.

Use low ground pressure equipment to spread the initial lift of material. If rutting occurs, fill the ruts with additional material before placing the subsequent lift. Do not blade out ruts. Do not turn construction equipment on the first layer of material.

714.04 A.1 Bedding **PAGE 379** **10/01/15**

Delete the first paragraph from Section 714.04 A.1.

714.04 A.6 Connection to Manholes, Inlets, and Pipes **PAGE 380** **10/01/15**

Replace Section 714.04 A.6 with the following:

6. Connection to Manholes, Inlets, and Pipes.
If connections are required to a manhole, inlet barrel, or pipe entrance, connect pipe by cutting the opening and grouting in the connecting pipe.

714.04 A.7 Compaction Control for Aggregate **PAGE 380** **10/01/15**

Replace Section 714.04 A.7 with the following:

7. Compaction Control for Aggregate.
Compact aggregate according to Section 203.04 E.2, “Compaction Control, Type A” The moisture content of the aggregate at the time of compaction shall be not less than 2.0 percentage points below, nor more than 3.0 percentage points above the optimum moisture content.

Compact aggregate for approach pipes according to the conduit manufacturer’s recommendation

Use a maximum lift thickness of 6 inches.

714.04 A.8 Compaction Control for Non-Aggregate Material **PAGE 380** **10/01/15**

Replace Section 714.04 A.8 with the following:

8. Compaction Control for Non-Aggregate Material.
If Common Excavation Type A is specified, follow the compaction requirements in Section 203.04 E.2, “Compaction Control, Type A”. If Common Excavation Type B is specified, follow the compaction requirements in Section 203.04 E.3, “Compaction Control, Type B”.

Compact material for approach pipes according to the conduit manufacturer’s recommendations.

748.03 MATERIALS **PAGE 393** **10/01/15**

Add the following item to the table:

Impervious Membrane Cure	810.01 B.1 or 810.01 B.2

750.03 MATERIALS **PAGE 395** **10/01/15**

Add the following item to the table:

Impervious Membrane Cure	810.01 B

Replace the paragraph directly after the table with the following:

For imprinted concrete use any size coarse aggregate specified in Section 802.01 C.2, “Coarse Aggregate”. Produce a mix that consists of 60 percent fine aggregate and 40 percent coarse aggregate.

754.04 D.2 Anchor for Telescoping Perforated Tubes Supports **PAGE 403** **10/01/15**

Replace the last two paragraphs in Section 754.04 D.2 with the following:

If installation is in either concrete or bituminous material, omit the soil plate or use a surface mount anchor base.

Core concrete and bituminous surfacing before installing the anchor unit and fill the cored area with like material that matches the surrounding surfacing.

754.04 F Removing and Resetting Signs and Supports **PAGE 407** **10/01/15**

Replace the Section 754.04 F with the following:

F. Removing and Resetting Signs and Supports.

1. General.
Remove and reset existing signs and supports as specified. Stockpile all signs and supports not to be reset at designated locations within the project limits. The Engineer will arrange to have stockpiled signs removed from the project limits and delivered to the Department’s facility.

Replace removed or reset signs and supports that are damaged during removing, resetting, or stockpiling at no additional cost to the Department.

Remove existing signs and supports as construction progresses, and immediately reset or install new signs.

The Engineer will allow the temporary reset of existing signs, or the temporary installation of new signs. Include the cost of installing and resetting signs temporarily in the price bid for other items.

2. Reset Sign Panel.
Remove sign panels from existing supports. Reinstall sign panels, angles, stringers, and steel channels on new supports.

Provide all necessary brackets and hardware to attach sign panels, angles, stringers, and steel channels on new supports.

754.04 I Overlay Panel Sign Refacing **PAGE 407** **10/01/15**

Replace the second paragraph of Section 754.04 I with the following:

Remove the legend, border, and symbol on those signs that have demountable copy and remove any existing sign overlays and place overlay panels on the signs. Do not remove direct applied sheeting legends, borders, and symbols. Direct apply the new legends, borders, and symbols to the overlay panels and install on the existing signs.

754.04 J Auxiliary Signs **PAGE 408** **10/01/15**

Replace the Section 754.04 J with the following:

J. Auxiliary Signs.
Install auxiliary signs used with route markers with the same background color as the route markers:

- Interstate, Blue;
- Interstate Business Loop, Green;
- State, White;
- US, White; and
- County, Blue.

754.05 METHOD OF MEASUREMENT **PAGE 408** **10/01/15**

Add the following to Section 754.05:

D. Reset Sign Panel.
The Engineer will measure the item "Reset Sign Panel" by the number of locations a sign or sign assembly has been reset.

E. Reset Sign Support.
The Engineer will measure the item "Reset Sign Support" by each leg of a sign support that has been reset.

760.03 Materials **PAGE 410** **10/01/15**

Replace Section 760.03 with the following:

760.03 MATERIALS
Use one of the following materials when applying a fog coat to rumple strips:

- SS-1h, Section 818.02 F, "Anionic Emulsified Asphalt";
- MS-1 Section 818.02 F, "Anionic Emulsified Asphalt"; or
- CSS-1h Section 818.02 E.1 "Cationic Emulsified Asphalt".

When MS-1 is used it may be diluted by the supplier or the Contractor.

760.04 F Traffic Control **PAGE 411** **10/01/15**

Replace Section 760.04 F with the following:

F. Traffic Control.

1. General.
Use a TMA as specified in Section 704.04 M, “Protection Vehicle with Truck Mounted Attenuation Device (TMA)”.

2. Centerline Rumble Strip Installation.
Provide flaggers and 2 sets of the required flagger signing for each direction of travel. Ensure that at least one set of the required flagger signing is in place in each direct of travel whenever work centerline installation is performed. Limit the work area to a maximum of 3 miles.

760.05 METHOD OF MEASUREMENT **PAGE 411** **10/01/15**

Add the following paragraph to the end of Section 760.05:

The Engineer will measure flagging and traffic control signs as specified in Section 704.05, “Method of Measurement”.

760.06 BASIS OF PAYMENT **PAGE 411** **10/01/15**

Add the following paragraph after the list of pay items in Section 760.05:

Flagging and traffic control signs will be paid for as specified in Section 704.06, “Basis of Payment”.

762.04 A.4.c Grooves for Epoxy Paint **PAGE 414** **10/01/15**

Replace the “Depth” row of Table 762-02 with the following:

Depth	45 to 55 mils

762.04 D.2 Short-Term Pavement Marking – Type NR (Non-Removable) **PAGE 418** **10/01/15**

Replace the second paragraph of Section 762.04 D.2 with the following:

Place the short term pavement markings at the rate specified in Section 762.04 C.2.b, “Rate of Application” with the following exception:

Exception: When the permanent pavement marking is specified as epoxy paint, apply the short term pavement marking at a thickness of 10 mils.

762.04 D.3 Short-Term Pavement Marking – Type R (Removable) PAGE 419 10/01/15

Replace Section 762.04 D.3 with the following:

3. Short-Term Pavement Marking – Type R (Removable).
Install Type R markings when the air and pavement temperatures are at a minimum of 50°F and expected to remain above 50°F.

If the air or pavement temperature falls below 50°F during installation, Type NR markings may be installed as specified in Section 762.04 D.2, "Short-Term Pavement Markings – Type NR (Non-Removable)". Install Type R markings once the specified temperatures exist.

Remove Type R markings once they are no longer necessary for traffic control operations. If Type NR markings were substituted for Type R markings, remove the Type NR markings using a method that does not leave a scar on the pavement.

762.06 Basis of Payment PAGE 419 10/01/15

Add the following to the end of the first paragraph:

If Type NR markings are substituted for Type R markings due to temperature requirements, the markings will be paid for at the contract unit price for Type R markings.

766.04 CONSTRUCTION REQUIREMENTS PAGE 425 10/01/15

Replace Section 766.04 with the following:

766.04 CONSTRUCTION REQUIREMENTS

A. General.
The mailbox owner will furnish a postal service approved mailbox. Install the furnished mailbox on the new support system.

B. Temporary Relocation.
If construction activities require the removal of the support system and delayed installation of the new support system, reset the existing support system at a location approved by the Engineer and postal service.

If construction activities require the removal of the support system and delayed installation of the new support system, relocate mailboxes to a location approved by the Engineer and postal service.

If existing mailboxes meet NCHRP 350 or MASH requirements, they may be reset adjacent to the roadway. If existing mailboxes do not meet NCHRP 350 or MASH requirements perform one of the following actions:

- Place them outside the clear zone;
- Place them on a 4 × 4 inch post; or
- Reset them using assemblies shown in the plans.

After construction has progressed to allow permanent installation, install the mailbox assemblies and mailboxes at the specified locations.

770.04 D.1 General **PAGE 428** **10/01/15**

Add the following to the end of Section 770.04 D.1:

Install duct seal on all conduits containing cables at controller cabinets, traffic signal bases, and pull boxes.

772.03 D Wiring Diagrams **PAGE 434** **10/01/15**

Replace the first paragraph with the following:

At the time the cabinet and control equipment is accepted, furnish a traffic signal cabinet wiring diagrams showing all circuits and parts in detail. Place the wiring diagram in the signal cabinet and submit one PDF copy to the Engineer.

772.04 A General **PAGE 435** **10/01/15**

Replace the second paragraph with the following:

Provide and bear all costs for the electrical service necessary to operate and maintain the traffic signal system until the system is accepted as specified in Section 772.04 N.3, “Supplemental Inspections and Final Acceptance”.

772.04 E.8 Final Testing **PAGE 439** **10/01/15**

Replace Section 772.04 E.8 with the following:

After installing sealer, perform the tests specified in Section 772.04 E.6, “Initial Testing”. Record the test results on SFN 60844 *Traffic Signal Loop Detector Test Report* and submit the form to the Engineer.

772.04 G Traffic Signal Standards and Combination Signal and Light Standards **PAGE 439** **10/01/15**

Replace number 3 with the following:

Install and tighten the anchor bolts as specified in Section 754.04 D.5, “Overhead Sign Structures”.

772.04 N Tests and Acceptance **PAGE 442** **10/01/15**

Replace 772.04 N with the following:

1. **General.**
   Furnish all instruments and personnel required for testing and record test results. If a subcontractor performed electrical work, ensure the subcontractor is present during testing and inspection.

   The Engineer will perform the initial and final inspections when:
   - Winds are 30 mph or less;
   - Ambient temperature is 15°F or greater; and

– It is not raining or snowing.

a. Malfunction Management Unit Test.
Before uncovering the signal heads, perform a malfunction management unit test. Record the test results on SFN 60836 *Traffic Signal Malfunction Management Unit Test* and submit the results to the Engineer.

b. Ground Test.
Before opening to traffic, perform a ground test. The maximum allowable resistance at the controller cabinet is 10 Ohms. The maximum allowable resistance at each traffic signal standard is 25 Ohms. Record and submit the test results on SFN 60834, *Traffic Signal Ground Test*.

2. Initial Inspection.
After the signal system is operational and open to traffic, submit a request to schedule the initial inspection. The system must be fully operational for a minimum of 15 days before the Engineer will perform the initial inspection. The Engineer will record the inspection results on form SFN 59867, *Traffic Signal Inspection* Checklist or SFN 60845 *Flashing Beacon Inspection Checklist*. Copies of completed forms will be sent to the Contractor.

3. Supplemental Inspections and Final Acceptance.
After performing corrections, submit a request for a supplemental inspection. The Engineer will perform a supplemental inspection within 30 days of receiving the request.

If this inspection discloses any unsatisfactory items, the Engineer will provide the Contractor with a written list of items that require correction. After correcting the items, request another supplemental inspection.

If the Engineer determines that the work is complete, the signal system must operate for 14 consecutive days without interruption from defective equipment or improper workmanship.

If the signal system fails within the 14 days, make necessary repairs. After repairs are complete, request another supplemental inspection.

If the signal system operates for 14 consecutive days without interruption from defective equipment or improper workmanship, the Engineer will consider the last supplemental inspection as the final inspection and will accept the signal system.

802.01 A.1 Development **PAGE 453** **10/01/15**

Replace the second paragraph with the following:

Design a mix that will attain a compressive strength of 3,000 psi after 7 days or a flexural strength of 450 psi after 7 days. Measure compressive strength according to AASHTO T 22 and flexural strength according to AASHTO T 97. Apply a correction factor of 0.92 when using 4 inch by 8 inch concrete cylinders.

802.01 C.2 Coarse Aggregate **PAGE 454** **10/01/15**

Replace Table 802-02 with the following:

Table 802-02
Miscellaneous Coarse Aggregate Properties

Test	Method	Max. Percent by Weight of the Plus No. 4 fraction
Shale	NDDOT 3	0.7
Iron oxide particles	NDDOT 3	4.0[1]
Lignite and other coal	NDDOT 3	0.5
Soft Particles (Excluding Shale, Iron oxide particles and Lignite and other coal)	NDDOT 3	2.5
Thin or Elongated Pieces	NDDOT 3	15
L.A. Abrasion	AASHTO T 96	40.0
Soundness (Sodium Sulfate)	AASHTO T 104	12

[1] For concrete for spall repairs and bridge deck overlays, the maximum iron oxide particles shall be 2.0 percent.

802.01 C.3 Fine Aggregate **PAGE 454** **10/01/15**

Replace the second paragraph of Section 802.01 C.3 with the following:

Test fine aggregates in accordance with AASHTO T 21. If the results of the analysis are darker than the standard color, determine the compressive strength of mortar mixed using the aggregate in accordance with AASHTO T 71. If the results of the AASHTO T 71 test result in a relative strength less than 95 percent, do not use the fine aggregate.

810.01 B Liquid-Membrane-Forming Compounds **PAGE 464** **10/01/15**

Add the following to the end of Section 810.01 B:

3. Curing Compound for Pigmented Concrete.
Use a curing compound when curing pigmented concrete that meets the requirements of ASTM C 309 Type 1-D.

816.04 AGGREGATE FOR MICRO SURFACING **PAGE 467** **10/01/15**

Replace Section 816.04 with the following:

816.04 AGGREGATE FOR MICRO SURFACING

A. General.
Use aggregate that is manufactured crushed stone such as granite, slag, limestone, or other high quality aggregate or combination thereof.

Before stockpiling aggregate, perform the tests specified in Table 816-03.

Table 816-03

Test	Test Method	Requirement
Soundness of Aggregates by Use of Sodium Sulfate	AASHTO T 104	15% Max
Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine[1]	AASHTO T 96	30% Max
Deleterious Substances	ND T 176	60 or Higher

[1] Perform the AASHTO T 96 test on the parent aggregate

B. Mix Design.

Develop a mix design using aggregate that meets the requirements of Table 816-04. Establish mix design target values for each sieve and submit the mix design before beginning placement operations.

Table 816-04
Aggregate Gradation for Development of Mix Design

SIEVE SIZE	TYPE II %PASSING	TYPE III %PASSING
3/8”	100	100
#4	90 – 100	70 – 90
#8	65 – 90	45 – 70
#16	45 – 70	28 – 50
#30	30 – 50	19 – 34
#50	18 – 30	12 – 25
#100	10 – 21	7 – 18
#200	5 – 15	5 – 15

C. Stockpile Tolerances.

The mix design target values will be used for acceptance of material. Gradation tests may vary from the mix design target values based on the stockpile tolerance shown in Table 816-05. The percent passing each sieve for gradation tests may not fall outside the gradation limits specified in Table 816-04.

Table 816-05

SIEVE SIZE	STOCKPILE TOLERANCE
3/8”	-
#4	± 5%
#8	±5%
#16	±5%
#30	±5%
#50	±4%
#100	±3%
#200	±2%

D. Acceptance.

1. Stockpile Testing.

Perform a gradation test in accordance with ND T 11 and ND T 27 for every 500 tons of material produced and placed in the stockpile. Also perform test ND T 176 when performing gradation tests. Submit the test results to the Engineer.

The Engineer will perform acceptance testing. If the result of the Engineer’s testing lead to rejection of the stockpile, additional material may be blended with the stockpiled material so that

the stockpile meets the requirements. The Engineer will resample and retest for both gradation and deleterious substances to determine if the stockpiled material will be accepted.

If choosing to blend additional material into the stockpile, use additional material that meets the requirements of Table 816-06. After blending, develop and submit a new mix design.

2. Gradation.
The Engineer will obtain 5 independent samples from the stockpile and perform a gradation analysis in accordance with ND T 11 and ND T 27. If the average gradation for each sieve is within the stockpile tolerance of the mix design target values, the Engineer will accept the material.

If the stockpile is rejected, additional material may be blended with the stockpiled material to obtain the required gradation. The Engineer will resample and retest to determine if the stockpiled material will be accepted.

If choosing to blend additional material into the stockpile, use additional material that meets the requirements of Table 816-03. After blending, develop and submit a new mix design.

3. Deleterious Substances.
The Engineer will determine the amount of deleterious substances in the aggregate using the same samples obtained in Section 816.05 D.2, “Gradation”. If the average of the test results is 60 or higher, the Engineer will accept the material.

816.05 AGGREGATE FOR SLURRY SEAL PAGE 469 10/01/15

Replace Section 816.05 with the following:

816.05 AGGREGATE FOR SLURRY SEAL

A. General.
Use aggregate that is manufactured crushed stone such as granite, slag, limestone, or other high quality aggregate or combination thereof. Use aggregate with 100 percent of the parent aggregate larger than the largest stone in the specified gradation.

Before stockpiling aggregate, perform the tests specified in Table 816-06.

Table 816-06

Test	Test Method	Requirement
Soundness of Aggregates by Use of Sodium Sulfate	AASHTO T 104	15% Max
Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine[1]	AASHTO T 96	35% Max
Deleterious Substances	ND T 176	60 or Higher

[1] Perform the AASHTO T 96 test on the parent aggregate

B. Mix Design.
Develop a mix design using aggregate that meets the requirements of Table 816-07. Establish mix design target values for each sieve and submit the mix design before beginning placement operations.

Table 816-07
Aggregate Gradation for Development of Mix Design

SIEVE SIZE	TYPE II %PASSING	TYPE III %PASSING
3/8”	100	100
#4	90 – 100	70 – 90
#8	65 – 90	45 – 70
#16	45 – 70	28 – 50
#30	30 – 50	19 – 34
#50	18 – 30	12 – 25
#100	10 – 21	7 – 18
#200	5 – 15	5 – 15

C. Stockpile Tolerances.

The mix design target values will be used for acceptance of material. Gradation tests may vary from the mix design target values based on the stockpile tolerance shown in Table 816-08. The percent passing each sieve for gradation tests may not fall outside the gradation limits specified in Table 816-07.

Table 816-08

SIEVE SIZE	STOCKPILE TOLERANCE
3/8”	-
#4	± 5%
#8	±5%
#16	±5%
#30	±5%
#50	±4%
#100	±3%
#200	±2%

D. Acceptance.

1. Stockpile Testing.

Perform a gradation test in accordance with ND T 11 and ND T 27 for every 500 tons of material produced and placed in the stockpile. Also perform test ND T 176 when performing gradation tests. Submit the test results to the Engineer.

The Engineer will perform acceptance testing. If the result of the Engineer’s testing lead to rejection of the stockpile, additional material may be blended with the stockpiled material so that the stockpile meets the requirements. The Engineer will resample and retest for both gradation and deleterious substances to determine if the stockpiled material will be accepted.

If choosing to blend additional material into the stockpile, use additional material that meets the requirements of Table 816-06. After blending, develop and submit a new mix design.

2. Gradation.

The Engineer will obtain 5 independent samples from the stockpile and perform a gradation analysis in accordance with ND T 11 and ND T 27. If the average gradation for each sieve is within the stockpile tolerance of the mix design target values, the Engineer will accept the material.

3. Deleterious Substances.
The Engineer will determine the amount of deleterious substances in the aggregate using the same samples obtained in Section 816.05 D.2, “Gradation”. If the average of the test results is 60 or higher, the Engineer will accept the material.

817.01 D.2.a Extraction Test Method **PAGE 472** **10/01/15**

Replace the second paragraph of Section 817.01 D.2.a with the following:

The Engineer will determine the percentage of asphalt binder in the stockpile in accordance with AASHTO T 164 and average the results obtained from the three samples. The material will be rejected if any single sample has a value greater than 4.0 percent or the average extraction is greater than 3.5 percent. If the stockpile is rejected, the stockpiled material may be blended with other material.

818.03 Bituminous Materials for Micro Surfacing **PAGE 475** **10/01/15**

Replace Table 818-01 with the following:

Table 818-01

Test	**Specification**	**Requirement**
Settlement and Storage Stability of Emulsified Asphalts, 24-h	AASHTO T 59	1% Minimum
Distillation of Emulsified Asphalt[1]	AASHTO T 59	62% Minimum
Tests on Emulsified Asphalt Residue		
Softening Point of Bitumen (Ring and Ball Apparatus)	AASHTO T 53	135°F Minimum

[1] Hold the temperature for this test at 350°F for 20 minutes.

830.01 CONCRETE PIPE AND DRAINAGE STRUCTURES **PAGE 480** **10/01/15**

Replace the second paragraph of Section 830.01 with the following:

Use an ACPA or NPCA certified plant in the construction.

856.01 A General **PAGE 495** **10/01/15**

Replace the “Slope Gradient” row in Table 856-01 with the following:

Slope Gradient Application	≤ 3H:1V	< 3H:1V - 2H:1V	≤ 2H:1V	< 2H:1 - 1.5H:1V

860.02 A Barbed Wire **PAGE 501** **10/01/15**

Replace Section 860.02 A with the following:

A. Barbed Wire.
Provide barbed wire that meets the requirements of AASHTO M 280. Provide wire that has a minimum gage of 12½ and at least 2 point barbs.

860.02 B Woven Wire **PAGE 501** **10/01/15**

Replace Section 860.02 B with the following:

Provide woven wire that meets the requirement of AASHTO M 279, Design Number 939-6-12½.

862.04 C 3-Cable **PAGE 505** **10/01/15**

Replace the Section 862.04 C with the following:

C. 3-Cable.
Provide round treated timber posts used for three-cable guardrail that are between 4.5 and 6.5 inches in diameter.

880.02 B.2 Epoxy Resin Material **PAGE 509** **10/01/15**

Replace Section 880.02 B.2 with the following:

2. Color.
Provide material that meets the requirements of Table 880-03 and 880-04 when tested in accordance with ASTM D 2805.

Table 880-03
CIE Chromaticity limits using illuminant "C" for Yellow Epoxy

x	0.470	0.485	0.520	0.048
y	0.440	0.460	0.450	0.420

Table 880-04
Daylight Directional Reflectance (Y)

Color	Minimum Value
White	83
Yellow	50

896.10 Controller Cabinet **PAGE 557** **10/01/15**

Replace the 3 with the following:

3. Provide a metal weatherproof cover that blocks air flow in cold weather, and adequately covers the fan vent assembly and the louver on the door. Install a gasket to the cover and attach the cover to the inside of the cabinet. Construct the cover of the same material as the cabinet.

   Provide a weep hole in the bottom loop on each end of the cabinet full-size door.

Build the cabinet to contain the following items:

- All items of control equipment specified in these Specifications.

- Provide a thermostatically-controlled minimum 250 watt strip-type heater mounted on the full-size door cover with a protective wire-mesh shield installed around the heater. Use a heavy-duty thermostat capable of being set within a temperature range of 30°F to 90°F. Activate the power to the fan and to the heater using a three-position toggle switch located on the auxiliary switch panel.

  Use a switch that operates vertically up and down with the:

  - Up position being FAN (power to the fan on and power to the heater off);
  - Center position being OFF (power to both the fan and the heater off); and
  - Down position being HEATER (power to the heater on and power to the fan off).

  Provide an electrical three-prong twist lock-type plug between the switch and the heater. Mount the heater thermostat on the auxiliary switch panel. Make the connection to the heater with stranded copper wire having 200°C insulation and noninsulated, solderless terminals.

- Provide three duplex receptacles with ground fault interrupter. Fuse the receptacles ahead of the main circuit breaker.

- Provide a switched lamp socket, fuse the lamp socket ahead of the main circuit breaker.

- Include the following in the maintenance switches inside the cabinet:

  - Stop time control.
  - Timer power.
  - Flash.
  - Vehicle detector input for each phase in use and all future phases.
  - Pedestrian input for each phase in use and all future phases.

10/1/2014

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION
PRICE SCHEDULE FOR MISCELLANEOUS ITEMS (PS-1)

The Contractor agrees to accept the following unit prices for each listed item of work and or material when no project contract unit price exists for that item. Each price listed will be full compensation for the cost of labor, material and equipment necessary to provide the item of work and/or material, complete in place, including (but not limited to) royalty, disposal of unsuitable material, equipment rental, sales tax, use tax, overhead, profit, and incidentals.

Each listed item is referenced to the Standard Specifications by Section number and Section name.

SECTION NO.	SECTION NAME	ITEM NAME	PRICE PER ITEM
107.08	Haul Roads	Water	$27 per M Gal
107.08	Haul Roads	Bitumen for Mix	Invoice Price [1] + 10%
107.08	Haul Roads	Bituminous Mix	$42 per Ton [2]
107.08	Haul Roads	Aggregate Base	$17 per Ton [2]
203.01 B	Rock Excavation	Rock Excavation	$11 per CY
203.01 C	Shale Excavation	Shale Excavation	Common Excavation Price + $1.00 per CY
203.01 D	Muck Excavation	Muck Excavation	$9 per CY
203.05 H.3	Embankment	Overhaul	$1.40 per CY - Mile
260	Silt Fence	Mucking Silt Fence	$3.90 per LF
260	Silt Fence	Removal of Silt Fence [3]	$4.25 per LF
261	Fiber Rolls	Mucking of Fiber Rolls	$3.90 per LF
261	Fiber Rolls	Removal of Fiber Rolls [3]	$4.25 per LF
420.04 E	Bituminous Seal Coat	Blotter Sand	$27 per Ton [2]
430.04 G	Hot Mix Asphalt (Exc. Material Hauled to Disposal Area)	Bituminous Mixture	Machine Placed: Bid or Invoice Price + $31 per ton Hand Placed: Bid or Invoice Price + $48 per Ton
704	Temporary Traffic Control	Flagging	$32 per MHR

[1] Price paid for bituminous material will be invoice price plus freight costs.

[2] Price Includes haul up to 10 miles. Payment for haul exceeding 10 miles will be according to Section 109.03 E, “Force Account.” The haul distance for aggregate base and bituminous mix will be based on the average haul. The haul distance for blotter sand will be from the point where the haul begins to the point where it enters the project.

[3] This is only for pre-existing items that were not installed under the Contract.

Effective October 1, 2014

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION
APPENDIX A OF THE TITLE VI ASSURANCES

During the performance of this contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the Contractor) agrees as follows:

1. Compliance with Regulations: The Contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, the Federal Highway Administration, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

2. Non-discrimination: The Contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.

3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations, either by competitive bidding, or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the Contractor of the Contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.

4. Information and Reports: The Contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the Federal Highway Administration to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a Contractor is in the exclusive possession of another who fails or refuses to furnish the information, the Contractor will so certify to the Recipient or the Federal Highway Administration as appropriate, and will set forth what efforts it has made to obtain the information.

5. Sanctions for Noncompliance: In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:

   a. withholding payments to the Contractor under the contract until the Contractor complies; and/or
   b. cancelling, terminating, or suspending a contract, in whole or in part.

6. Incorporation of Provisions: The Contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The Contractor will take action with respect to any subcontract or procurement as the Recipient or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the Contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the Contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.

Effective October 1, 2014

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION
APPENDIX E OF THE TITLE VI ASSURANCES

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the Contractor) agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

Pertinent Non-Discrimination Authorities:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.,* 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 *et seq.),* (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.),* as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.),* (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION (NDDOT)

2016 ON-THE-JOB TRAINING SPECIAL PROVISION

The bidder's signature on the proposal sheet indicates the bidder agrees to take part in the On-the-Job Training (OJT) Program and to follow this OJT Special Provision. Contractors that fail to follow this special provision will be subject to suspension of progress payments or sanctions up to and including revocation of bidding privileges.

I. POLICY STATEMENT

The purpose of the OJT Program is to provide training in the highway construction industry for minority, female, and economically disadvantaged individuals, hereafter known as the targeted group. Pursuant to 23 Code of Federal Regulations Part 230, Subpart A, Appendix B - Training Special Provisions, this program provides for on-the-job training aimed at developing full journeyworkers in the type of trade or job classification involved. Training and upgrading minorities and women in highway construction trades is the primary goal of the program.

The Contractor shall take all necessary and reasonable steps to ensure that minorities and women have the opportunity to compete for and participate as trainees or apprentices and to develop as journey-level workers in the type of trade or job classification employed. Contractors may use the NDDOT OJT preapproved training programs, apprentices in approved Bureau of Apprenticeship and Training (BAT) programs, or submit their own on-the job training curriculum for approval by NDDOT and Federal Highway Administration (FHWA).

II. ASSIGNED OJT POSITIONS

A. Contractors are assigned trainee positions based on federal highway dollars awarded by NDDOT to a contractor from October 1 to September 30. Trainee assignments are not project specific. The number of trainee positions assigned will be determined by formula outlined in the OJT Program Manual. https://www.dot.nd.gov/divisions/civilrights/docs/ojtprogram.pdf.

B. Contractors will receive the number of positions assigned and links to resources necessary for completion of program requirements via email.

C. The number of trainee positions assigned to each contractor will increase proportionately, as shown in the OJT Program Manual, for any applicable federally funded projects awarded to them.

Failure to follow this OJT Special Provision and the accompanying OJT Program Manual may result in suspension of progress payments or sanctions up to and including revocation of bidding privileges.

III. ONLINE RESOURCES

OJT Program Manual: Includes program requirements, wage rates, and curriculum: https://www.dot.nd.gov/divisions/civilrights/docs/ojtprogram.pdf

SFN 9762 Request for On-the-Job Training Program Approval: http://www.dot.nd.gov/forms/sfn09762.pdf

SFN 60226 Request for On-the-Job Trainee Approval: http://www.dot.nd.gov/forms/sfn60226.pdf

SFN 51023 Voucher for On-the-Job Training Program Hourly Reimbursement: http://www.dot.nd.gov/forms/sfn51023.pdf

Davis-Bacon and Related Acts (DBRA) Handbook: https://www.dot.nd.gov/manuals/civilrights/davisbacon.pdf

IV. APPROVALS REQUIRED

A. Requests for Approval of Training Programs and Trainee Candidates must be submitted to Civil Rights Division (CRD). Contractors must request and receive program and trainee candidate approval in order to pay trainees less than the established Davis-Bacon wage for the job classification concerned. No training

program hours will count toward the fulfillment of an assigned trainee position or be eligible for reimbursement without prior approval. No retroactive approval will be granted.

1. Submit *SFN 9762 Request for On-the-Job Training Program Approval* and the pre-approved training curriculum for each trainee position assigned by April 1 or within fifteen (15) calendar days of notification of any additional position assignments. http://www.dot.nd.gov/forms/sfn09762.pdf

2. Submit SFN 60226 *Request for On-the-Job Trainee Approval* and each trainee's employment application. http://www.dot.nd.gov/forms/sfn60226.pdf

3. Submit *SFN 7857 Application for Eligibility,* completed/approved by Job Service North Dakota (JSND) to qualify an economically disadvantaged individual for participation in the OJT Program.

B. Pre-approved curriculum: NDDOT's OJT Program Manual contains pre-approved training curriculum for a number of skilled trade positions. Contractors should select a training program(s) based on their company's employment/staffing needs.

C. Customized curriculum: To request a training curriculum not included in the pre-approved curriculum, submit a written request for approval by NDDOT and FHWA.

The request must include:

- A training curriculum, including the classification requested, minimum number of hours required, and type of training the individual will receive to achieve journeyworker status.
- A minimum wage scale.

If approved, each new classification must comply with the provisions specified in the OJT Program Manual. No hours worked prior to approval will be credited toward completion of the customized training program. Training programs for classifications not covered by the Davis-Bacon and Related Acts (DBRA) will be considered on a limited basis.

The contractor may commence its "customized" training as of the date of the written approval.

D. Union apprenticeship and on-the-job training programs registered with the Bureau of Apprenticeship and Training (BAT), U.S. Department of Labor, may be used for trainee positions assigned under the OJT Program, provided the trainees or apprentices are minority, female, or economically disadvantaged. Nonminority males not certified as economically disadvantaged may only be used when the contractor has requested and received approval, from the Department, for additional trainee positions. The apprenticeship indenture agreements serve as the trainee's job application and must be provided prior to any hours being credited toward OJT Program completion.

E. Power Equipment Operators:

The contractor may train an individual on a combination of equipment if each piece of equipment falls within the same groups of power equipment operators identified in the training curricula (groups 1-3 and groups 4-6). These power equipment operator groups are referenced to the federal DBRA wage rates contained in the contract proposal. As an example, a "utility operator" may receive training on a broom, a front-end loader less than 1½ cubic yards, or other piece of equipment that is used around a paver if each piece falls within either groups 1-3 or groups 4-6. When multiple wage rates apply, the trainee's wage will be based on the equipment being operated at the time or on the highest of the applicable wage rates.

Use of the classification "pickup machine operator (asphalt dump-person)" as a group 4 power equipment operator is considered standard industry practice. The classification is defined as: "Operates the controls on the pickup machine that runs in front of the paver, trips the levers on the dump trucks, and balances the loads for the paver. The pickup machine operates on similar principles as a shouldering machine."

V. NDDOT'S RESPONSIBILITIES

A. The NDDOT OJT supportive services (OJTSS) consultant will monitor excerpts from the weekly certified payrolls submitted with the monthly vouchers for reimbursement. This includes weekly payrolls from contractors working on state funded only projects. The OJTSS consultant will assess when the trainees have completed the specified number of hours and their wages are increased accordingly. The OJTSS consultant will also assure that applicable fringe benefits are paid either directly to the trainees or for the trainee into approved plans, funds, or programs.

B. The OJTSS consultant is charged with visiting trainees and monitoring their progress under the OJT Program. To facilitate the on-site visits, the OJTSS consultant will contact contractors for the location of the trainees weekly.

VI. CONTRACTOR'S RESPONSIBILITIES

A. Appoint a company employee to be available and respond to weekly contacts by the OJTSS consultant. OJTSS monitors the status of assigned trainee positions (e.g., program and trainee approvals, trainees' progress, etc.). The OJTSS consultant will contact the individual listed on the company's approved SFN 60226 Request for OJT Trainee Approval. The appointed must reply to communications from the Department and the OJTSS consultant in a timely manner.

B. Take steps to ensure trainees are aware they are formally enrolled in the OJT program.

C. Make trainees available to the OJTSS consultant for at least two on-site visits during the construction season.

D. Identify trainees on the payroll excerpts, for example: "grp. 4 roller operator trainee." This includes trainees in job classifications not covered by DBRA. Handwritten notes are appropriate for identification.

E. Assign each trainee to a particular person–either a supervisor or an employee proficient in the skills to be trained–who shall see that the trainee is given timely, instructional experience. This person must be familiar with the OJT Program, keep proper records, and ensure completion of the required training hours in accordance with the training curriculum.

F. Make the trainer and project superintendent available to the OJTSS consultant for at least two on-site visits each construction season.

G. May notify the Department to "propose graduation" or discontinue the training period of a trainee who has completed 90% or more of their hours and thereafter advance the trainee to journeyworker status.

H. Notify the Department when a trainee completes the number of hours required to graduate from the OJT Program. The Department will issue a certificate of completion and a wallet-sized card to the trainee.

I. May upgrade proficient trainees from one power equipment operator group or truck driver group to another, with the approval of CRD. Fewer hours are required to complete the upgraded position.

The minimum number of hours required will be:

Power Equipment Operator Groups 4-6 to Groups 1-3 = 400 hrs.
Class C Truck Driver to Class B = 200 hrs.
Class B Truck Driver to Class A = 200 hrs.

Depending on the variety of experience the trainee has gained under the previous curriculum, the difference in the hours may be deducted from the actual operation of the piece of equipment or truck. The contractor will need to review the trainee's past performance in order to make this determination.

J. Commercial driver's license (CDL) holders having over-the-road driving experience, with little or no highway construction experience, may be considered to have completed the Class C truck driver training curriculum and, therefore, are eligible to be upgraded to a Class B truck driver trainee, with the approval CRD.

K. May transfer trainees from one project to another in order to complete the OJT Program. If transfers are made, CRD must be notified and provided with the name of the trainer. The training hours will count toward overall OJT Program completion.

L. May use trainees on municipal, private, or other non-highway work and work performed out of state. The training hours will count toward overall OJT Program completion; however, no program reimbursement will be made for those hours. In addition, the hours will be limited to no more than 25% of the total hours required under the training curriculum.

M. Contractors may delegate or reassign trainee positions to subcontractors, with the acceptance of the subcontractors and the approval of CRD. The prime contractor must verify that the trainee will be able to accumulate enough hours to complete his or her training program. If approved, the subcontractor must obtain training program and trainee approval from CRD before the trainee begins work under the OJT program. Program reimbursement will be made directly to the prime contractor. The trainee position will remain the responsibility of the prime contractor.

N. May use trainees on projects subject to TERO requirements as part of the core crew or as part of the skilled labor supplied by the contractor.

O. Contractors may not use one trainee to fill multiple trainee positions. For instance, a subcontractor may not use the same trainee in the same training program to simultaneously fill two or more trainee positions reassigned to them by prime contractors.

P. May use a trainee on a piece of equipment in groups 1-3 or groups 4-6 for one assigned trainee position, then once that trainee has completed the program, the trainee may be trained on a different piece of equipment in groups 1-3 or groups 4-6 to fulfill a second assigned trainee position. When a trainee is used for a second time within a group, the contractor must pay that trainee at the higher wage rate as described in paragraph B under Wage Rates (page 8).

VII. CLASSROOM TRAINING

A. Classroom training may be used to train employees. Each classroom training curriculum must be pre-approved by CRD if the contractor wishes to count the classroom hours as training hours and be reimbursed.

Submit a proposed classroom training curriculum to CRD for approval. Define the type of training the individual will receive, classroom training curriculum, and the minimum number of hours required. The Department will determine the number of hours of credit each trainee will receive toward their training. No retroactive approval will be granted.

B. Contractors will be reimbursed for classroom training hours after the trainee has completed 80 hours of work on highway construction projects.

C. Reimbursement for classroom training will be limited to 60 hours per trainee per construction season. Qualified testing technicians and concrete testing technicians/inspectors will not be included in the 60-hour limit. Reimbursement for classroom training required under the NDDOT Transportation Technician Qualification Program will be at the NDDOT discretion.

D. The minimum wage scale to be used for classroom training will be that of the first federal-aid highway construction project on which the trainee will be employed. If the trainee is already employed on a federal-aid highway construction project, the trainee will be paid in accordance with the minimum wage scale applicable to that project. However, if the first project on which the trainee will be employed is a state funded only contract, the minimum wage scale to be used for the classroom training will be that of the appropriate DBRA wage in effect at the time of award of the state funded contract.

VIII. WAGE RATES

A. In no case shall the minimum wage be less than that of the Group 1 Laborer classification in the federal

DBRA wage rates contained in the contract proposal. A trainee working on a state funded only project, must be paid the DBRA wage rate in effect at the time of award for the type of work the trainee is performing.

B. The minimum wage rates shall not be less than 80% of the journeyworker rate for the first two quarters of training, 85% of the journeyworker rate for the third quarter, and 90% of the journeyworker rate for the fourth quarter.

- Under the power equipment operator training curricula only, once a trainee has completed a training curriculum in either groups 1-3 or groups 4-6, the contractor may enroll the trainee in another training curriculum on a different piece of equipment in either groups 1-3 or groups 4-6.
- The minimum wage rate under the trainee's second program shall not be less than 85% of the journeyworker rate for the first two quarters of training, 90% of the journeyworker rate for the third quarter, and 95% of the journeyworker rate for the fourth quarter.
- For the purpose of the OJT Program, a quarter is 25% of the hours the trainee works toward completion of their approved program. The first two quarters of a 550-hour training curriculum would end after 275 hours, the third quarter after 138 hours, and the fourth after 137 hours.

C. Trainees shall be paid full fringe benefit amounts, where applicable, in accordance to DBRA requirements.

D. At the completion of the OJT Program, the trainee shall receive the wages of a skilled journeyworker.

IX. RECRUITMENT AND SELECTION

A. Trainee Prerequisites:

Trainees must possess basic physical fitness for the work to be performed, dependability, willingness to learn, ability to follow instructions, and an aptitude to maintain a safe work environment.

B. Licenses:

Truck driver trainees must possess appropriate driver permits or licenses for the operation of Class A, B, and C trucks. When an instructional permit is used in lieu of a license, the trainee must be accompanied by an operator who:

1. Holds a license corresponding to the vehicle being operated;
2. Has had at least one year of driving experience; and
3. Is occupying the seat next to the driver.

C. Recruitment:

1. Place notices and posters setting forth the contractor's Equal Employment Opportunity (EEO) Policy and the availability of the OJT Program in areas readily accessible to employees, applicants for employment, and potential employees.
2. Employ members of the targeted group (minority, female, or economically disadvantaged individuals) for all trainee positions assigned in accordance with the OJT Program. Additional positions requested by the contractor may be filled by individuals outside of the targeted groups.
3. Conduct systematic and direct recruitment through public and private employee referral sources.
4. Screen present employees for upgrading to higher skilled crafts. A present employee may qualify as a trainee; however, no work hours will be reimbursed or counted toward program completion prior to training program and trainee approval by CRD.

D. Selection:

1. Hire and enroll OJT trainee candidates who qualify as an individual in the targeted group.
2. Select a training program(s) based on their company's employment/staffing needs.

3. Individuals in the targeted group having experience in the selected curriculum may be eligible to participate in the OJT Program providing they:

    - are not or have not been journeyworkers in the selected curriculum, and/or
    - have not been previously trained in the selected curriculum

4. Non-minority males who are economically disadvantaged must obtain written certification from Job Service North Dakota (JSND) to qualify for the OJT Program. Contractors wishing to hire and enroll economically disadvantaged candidates must provide JSND's certification along with SFN 60226 and the employment application when requesting trainee approval.

    - JSND is the only agency that may certify an individual as economically disadvantaged. If JSND refers the candidate to the contractor, written certification under this category will be provided to the contractor at the time of the interview.
    - Any person wishing to obtain this certification must apply to JSND and complete the Workforce Investment Act Program's Application for Eligibility (SFN 7857). A contractor recruiting a candidate who may qualify must contact the Workforce Investment Act Program Manager at JSND. JSND contacts are also online: http://www.dot.nd.gov/divisions/civilrights/docs/jobservice-workforce-invest-contacts.pdf

X. BASIS OF PAYMENT

A. Contractors will be paid $4.00 for each hour of training in accordance with the OJT Program Manual.

B. Reimbursement will be made directly to the contractor. Complete SFN 51023 Voucher for On-the-Job Training Program Hourly Reimbursement for each trainee. Attach excerpts from the weekly certified payrolls showing the trainee's hours, rate of pay, and how applicable fringe benefits were paid. Excerpts from weekly payrolls are also required for state funded only projects. Vouchers without excerpts from payrolls will not be paid until the excerpts are provided. If the excerpts from the payrolls are not provided within one week, the voucher will not be paid and the trainee's hours will not be credited toward completion. http://www.dot.nd.gov/forms/sfn51023.pdf

C. Submit completed vouchers to CRD for approval and processing by the fifteenth (15th) calendar day of every following month the trainee is employed under the OJT Program.

Regardless, all vouchers for trainee hours worked on state funded only projects from July 1 to June 30 must be received by CRD no later than July 15 in order to be reimbursed. All vouchers for trainee hours worked on federally funded projects from October 1 to September 30 must be received by CRD no later than October 15 in order to be reimbursed. This is due to state and federal end-of-the-year budget fiduciary requirements.

XI. FAILURE TO PROVIDE THE REQUIRED TRAINING OR HIRE THE TRAINEE AS A JOURNEYWORKER

A. No payment shall be made to a contractor for failure to provide the required training or failure to hire the trainee as a journeyworker when such failure is caused by the contractor and evidences a lack of good faith on the part of the contractor in meeting the requirements of this OJT Program Special Provision.

B. If payments have been made, the Department will deduct the amount paid from the contractor's progress payment.

C. A trainee should be hired to begin training as soon as feasible after start of work utilizing the skill involved and remain employed as long as training opportunities exist in the approved work classification or until the trainee has completed his or her training program.

D. It is not required that all trainees be employed for the entire length of the construction season. A contractor will have fulfilled its responsibilities under this OJT Special Provision if it has provided acceptable training to

the number of trainees assigned. The number trained shall be determined on the basis of the total number enrolled for a significant period.

XII. UNFILLED OR INCOMPLETE TRAINEE POSITIONS

A. Provide written explanation for unfilled or incomplete trainee assignments to CRD by October 1 of the current construction season. CRD will decide, on a case-by-case basis, whether to carry the assigned positions over to the next construction season.

B. Positions carried over from the previous construction season must be among the first positions filled at season startup. To notify CRD of the trainee's rehiring, submit *SFN 60226 Request for On-the-Job Trainee Approval*, marking 'Check if Carryover Trainee' in the Approved Training Program section of the form. There is no need for the training position or a returning trainee to be re-approved.

C. Sanctions, up to and including revocation of bidding privileges, may be imposed on the contractor for failure to provide sufficient explanation and documentation for reasons assigned trainee positions when unfilled or incomplete.

XIII. DEFINITIONS

Carryover Position: Incomplete trainee position carried forward from a prior program year.

Carryover Trainee: Trainee scheduled to continue required training hours under an approved training program from a prior program year.

CRD: NDDOT's Civil Rights Division administers the NDDOT On-the-Job Training Program.

Good Faith Efforts: A contractor's documented efforts to fulfill the OJT Program requirements, e.g., a new hires list, examples and locations of advertisements, list of current employees reviewed for skills upgrades, and any other means of demonstrating the contractor's efforts.

Journeyworker: A worker employed in a trade or craft who has attained a level of skill, abilities, and competencies recognized within the industry.

OJT Supportive Services (OJTSS): A consultant under contract with the Department to provide in-person oversight, support, and guidance to contractors and trainees to increase the effectiveness of approved training programs.

Trainee: A person who receives on-the-job training, whether through an apprenticeship program or other program approved or accepted by FHWA.

Trainer/Supervisor: Contractor's employee assigned to mentor, train, supervise, and support a OJT Program trainee.

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

FLEXIBLE PAVEMENT SURFACE TOLERANCE

Project 4-083(102)203 – PCN 18220

DESCRIPTION

This provision details the surface tolerance requirements, corrective actions, performance incentives, and contract price adjustments for flexible pavement.

CONSTRUCTION REQUIREMENTS

A. Applicable Areas and Exceptions.

The pavement smoothness will be determined by profiling the finished surface of the mainline pavement. All finished bituminous surfaces will be profiled with the following exceptions:

1. Bridge decks and/or approach slabs and 150 feet on either side.
2. Side roads and approaches.
3. Shoulders, ramps and gore areas.
4. At-grade railroad crossings and 150 feet on either side.
5. Beginning and end of the project and 50 feet on either side of these boundaries.
6. 50 feet from areas that are not receiving surfacing.
7. Where safety and roadway geometrics do not allow the proper operating speed for the profiler to collect data. These areas will be determined by the Engineer.

On surfaces exempt from the profile testing, the Engineer will determine the pavement smoothness in accordance with Section 430.04 K, “Tolerances”.

B. Profiler.

The Engineer will furnish and operate the data collection equipment. The smoothness of the final roadway surface profile will be measured and analyzed using the International Roughness Index (IRI) to the nearest 0.1 inch. The Engineer will use a Class 1 profiler meeting ASTM E 950.

C. Operation.

The Engineer will use lasers to collect the profile in each wheel path of each lane.

The Engineer will trace the profile at approximately 31 and 97 inches, measured from the left edge of the lane, as determined by the direction of traffic. Provide traffic control for 500 feet beyond the ends of the project to facilitate the collection of profile data.

The data will be marked and labeled at the beginning and end of each trace, and event markers as identified by the Engineer.

Each trace will be labeled showing:

- Project;
- Location;
- Lane;
- Date tested; and
- Operator's name.

The Engineer will not test the roadway between November 30 and May 15. The Engineer will not test when the ambient temperature is below 32°F, or while it is raining or under inclement weather conditions. The Engineer will test when the pavement is dry and at an agreed upon time between the Engineer and the Contractor.

Prepare the surface for profile collection to ensure a clean surface for accurate testing. The Engineer will collect the profile at the agreed upon time, regardless of the condition of the final surface.

After the final lift of pavement is complete, schedule a time for the profile to be collected. The Engineer will collect the profile within 5 working days after notification. Data will be collected and the results submitted to the contractor a maximum of 5 working days after the testing date.

If the final lift of pavement cannot be completed before November 30, the Engineer will collect data for all portions of the roadway that have the final lift in place. Profile data for the unfinished portion of the roadway will be collected after May 15 of the following year.

D. Evaluation.

A lot is defined as a 528 foot road segment, one lane wide The Engineer will include a partial lot less than or equal to 370.0 feet in the previous lot. The Engineer will treat a lot greater than 370.0 feet as an independent lot. The MRI will be determined by averaging the IRI values from the right and left wheel paths to the nearest 0.1 inch.

The Engineer will evaluate the data and the data will remain the property of the Department. The MRI data will be used to determine performance incentives, contract price adjustments, and the need for corrective action.

E. Corrective Actions.

Areas that would result in a contract price adjustment may be ground to a lower lot MRI. If grinding occurs and results in an MRI of less than 56.0, the Engineer will not apply a performance incentive to that lot. Lots with an initial MRI of 48.1 or less will receive a performance incentive based on the initial readings, before grinding.

Submit a detailed corrective action plan. Corrective action can include a mill and overlay or diamond grinding. Perform corrective action in accordance with the relevant specifications. If the corrective action includes diamond grinding, apply a fog coat to the ground areas.

Do not perform corrective actions until the Engineer has approved the corrective action plan.

Grind lots to a maximum MRI of 75.0 in /mile.

The Engineer will collect a second profile a maximum of 5 working days after the completion of corrective action. If additional corrective action is necessary, the Engineer will apply a liquidated damage of $1,500 per trip for each profile collected after the second profile.

Perform corrective action on surface irregularities that exceed the requirements of Section 430.04 K, “Tolerances”.

F. Grinding.

Use equipment that does not cause strain or damage to the underlying surface of the pavement. Do not cause excessive ravels, aggregate fractures, or disturbance of the joints.

Perform grinding in the longitudinal direction so grinding begins and ends at lines normal to the pavement centerline. Do not overlap more than 2 inches between passes and ensure the depth variance between adjacent passes is less than 1/8 inch. Feather the grinding at the beginning and end of each pass.

Grind high shoulders to provide drainage and safety.

Grind the full width of the lane and daylight grinding on the shoulder by performing a feather pass.

Grind a minimum length of 30 feet. Join grind sections if the distance between grind sections is less than 60 feet.

When grinding in areas with speeds less than 45 MPH, areas with curb and gutter, and areas adjacent to waterways continuously collect all slurry or residue resulting from the grinding operation. Dispose of the slurry or residue as specified in Section 107.17, “Removed Material”.

BASIS OF PAYMENT

A. Liquidated Damages.

If the project would be considered substantially complete, as specified in Section 108.07 B, “Failure to Complete within the Contract Time” and corrective action is required, the Engineer may suspend time charges and the assessment of liquidated damages for up to 21 calendar days after the contract time has expired. If the corrective action is not complete within 21 calendar days after the contract time has expired, the Engineer will restart time charges and will assess liquidated damages.

B. Ride Quality.

The Engineer will pay a performance incentive for ride quality based on Table 1.

Table 1
Ride Quality Performance Incentives

MRI Range	Performance Incentive per Lot
≤ 34.0	$300
34.1 to 39.0	$225
39.1 to 44.0	$150
44.1 to 48.0	$75
48.1 to 56.0	$0

The Engineer will process contract price adjustments for ride quality based on Table 2.

Table 2
Ride Quality Contract Price Adjustments

MRI Range	Contract Price Adjustment per Lot
48.1 to 56.0	$0
56.1 to 62.0	($100)
62.1 to 69.0	($200)
69.1 to 75.0	($400)
75.1 ≥	Corrective Action

C. MISCELLANEOUS

Include costs necessary to prepare the roadway for testing in the contract unit price for asphalt pavement items.

Traffic control items, including flagging and pilot cars will be paid for according to Section 109.03, “Compensation for Contract Revisions”.

IRI DATA FOR PCN 18220 PROJECT NO. SOIB-4-083(102)203							
Hwy 83, Northbound Survey Data Collection Date = 10/19/2015							
HWY	Start-Mi	End-Mi	IRI_ Left Wheel Path	Standard Deviation	IRI_Right Wheel Path	Standard Deviation	IRI_Average
83	203.8	203.9	131.9	116.6	117.4	92.7	124.6
83	203.9	204	117.7	102.2	107.5	102.8	112.6
83	204	204.1	88.8	72.9	90.3	65.6	89.6
83	204.1	204.2	106.2	94.2	88.5	68.8	97.3
83	204.2	204.3	116.7	71.6	120.9	77.2	118.8
83	204.3	204.4	115.1	60.6	96.8	50.4	106
83	204.4	204.5	108.8	63.6	94	51.4	101.4
83	204.5	204.6	146.1	122.8	116.4	83.3	131.2
83	204.6	204.7	137.7	121.9	112.4	96.8	125.1
83	204.7	204.8	128	115.5	118.2	91.2	123.1
83	204.8	204.9	125.7	88.4	113.1	81.4	119.4
83	204.9	205	104.4	82.8	110.9	73	107.7
83	205	205.1	122.2	93.3	119.3	83.8	120.7
83	205.1	205.2	108.6	104.7	152.7	157.7	130.6
83	205.2	205.3	107.3	93.3	104.1	102.6	105.7
83	205.3	205.4	158.2	107.2	133.6	123.3	145.9
83	205.4	205.5	113.2	72.4	112.1	100.8	112.7
83	205.5	205.6	98.9	61.1	98.8	76	98.8
83	205.6	205.7	95.5	70.7	116.5	98.4	106
83	205.7	205.8	100.5	63.2	103.4	68.4	102
83	205.8	205.9	112	64.3	101	59.1	106.5
83	205.9	206	87.7	49.1	116.9	96	102.3
83	206	206.1	129.3	83	115.7	81.8	122.5
83	206.1	206.2	107.4	72.3	85.9	54	96.6
83	206.2	206.3	124	91.3	97.8	56.8	110.9
83	206.3	206.4	136.5	91.7	139.8	88.2	138.2
83	206.4	206.5	131.8	78.3	124.1	78.4	127.9
83	206.5	206.6	133.1	74	101	47.7	117.1
83	206.6	206.7	129.2	82	147.7	89.6	138.4
83	206.7	206.8	126.5	88.6	157.2	88	141.8
83	206.8	206.9	128.5	99.6	124.5	106.2	126.5
83	206.9	207	80.1	41.7	124.4	83.8	102.2
83	207	207.1	139.7	106.9	134.1	70.6	136.9
83	207.1	207.2	91.1	43.6	87.2	37.1	89.2
83	207.2	207.3	86.9	39	78.3	35.4	82.6
83	207.3	207.4	74.3	38.2	79.7	32.3	77
83	207.4	207.5	59	25.5	71.3	36	65.2

IRI DATA FOR PCN 18220 PROJECT NO. SOIB-4-083(102)203							
Hwy 83, Northbound Survey Data Collection Date = 10/19/2015							
HWY	Start-Mi	End-Mi	IRI_ Left Wheel Path	Standard Deviation	IRI_Right Wheel Path	Standard Deviation	IRI_Average
83	207.5	207.6	72.9	42.2	84.9	54.2	78.9
83	207.6	207.7	79.6	58.8	91.3	63.4	85.4
83	207.7	207.8	98.7	69.1	100.8	54	99.7
83	207.8	207.9	98.7	70.9	123.8	86.3	111.2
83	207.9	208	128.5	86.1	83.3	61.5	105.9
83	208	208.1	171.4	143	149.3	140.5	160.4
83	208.1	208.2	161.7	112.3	135.1	102	148.4
83	208.2	208.3	132.3	113.4	123.4	98.8	127.9
83	208.3	208.4	109.5	86.6	145.1	121.6	127.3
83	208.4	208.5	85.5	51.3	118.2	94.1	101.9
83	208.5	208.6	71.9	56.4	103.6	87.5	87.7
83	208.6	208.7	140.1	115.5	143.1	114.5	141.6
83	208.7	208.8	103.5	74.3	122.2	107.9	112.9
83	208.8	208.9	99.8	56.5	89.6	51.5	94.7
83	208.9	209	77.2	47.5	79.8	53.2	78.5
83	209	209.1	110.7	75.9	96.6	85.9	103.6
83	209.1	209.2	93.9	62.2	119.5	84.2	106.7
83	209.2	209.3	91.1	53.5	111.4	74.3	101.2
83	209.3	209.4	90.9	57.4	113.5	85.1	102.2
83	209.4	209.5	96.7	64	145.8	120.4	121.3
83	209.5	209.6	88.9	47.4	117.4	68.5	103.1
83	209.6	209.7	110.3	66.3	104.2	60.8	107.2
83	209.7	209.8	83.1	48.7	108.6	86.4	95.9
83	209.8	209.9	89.6	62.5	79.6	62.5	84.6
83	209.9	210	90.5	52.9	81.3	47.3	85.9
83	210	210.1	83	60.2	96.8	73.9	89.9
83	210.1	210.2	111	75	109.8	99.4	110.4
83	210.2	210.3	93.5	68.1	133.2	105.3	113.3
83	210.3	210.4	125.7	97	157.2	87.7	141.5
83	210.4	210.5	129.9	60.9	147.2	91.1	138.6
83	210.5	210.6	108.2	114.4	144.5	127.2	126.3
83	210.6	210.7	131.9	111.4	140.7	102	136.3
83	210.7	210.8	94.9	62.3	105.3	85.7	100.1
83	210.8	210.9	139	118.2	149.7	126.2	144.3
83	210.9	211	91.3	57.2	108.5	66	99.9
83	211	211.1	86.2	57.3	120.2	131.5	103.2
83	211.1	211.2	91	61.7	122.9	100.2	106.9

IRI DATA FOR PCN 18220 PROJECT NO. SOIB-4-083(102)203							
Hwy 83, Northbound Survey Data Collection Date = 10/19/2015							
HWY	Start-Mi	End-Mi	IRI_ Left Wheel Path	Standard Deviation	IRI_Right Wheel Path	Standard Deviation	IRI_Average
83	211.2	211.3	118	84.5	179.7	130.8	148.9
83	211.3	211.4	127.4	83.4	175.7	154.7	151.6
83	211.4	211.5	115.3	93.4	123.9	105.2	119.6
83	211.5	211.6	99.7	65.5	104.3	66.9	102
83	211.6	211.7	110.6	71.7	98.2	49.1	104.4
83	211.7	211.8	105.8	51.5	121	81.5	113.4
83	211.8	211.9	108.3	50.5	110.4	57.1	109.4
83	211.9	212	106.9	63.1	111	66.7	108.9
83	212	212.1	136.1	87.8	115.6	71.9	125.9
83	212.1	212.2	88.5	46.3	108.1	81.1	98.3
83	212.2	212.3	89.5	37.5	92.8	52.6	91.2
83	212.3	212.4	114.2	58.7	107.6	58.2	110.9
83	212.4	212.5	120.2	72.3	124.6	63.4	122.4
83	212.5	212.6	112.9	83.9	86.6	51.7	99.7
83	212.6	212.7	169.3	102.3	129.8	89.2	149.6
83	212.7	212.8	109.7	72.6	142.2	110.1	125.9
83	212.8	212.9	91.5	49.7	125.6	81.4	108.5
83	212.9	213	87.5	53.1	102.6	53.5	95.1
83	213	213.1	141.3	120.3	129.8	116.2	135.6
83	213.1	213.2	162.3	124.2	123.6	102.3	142.9
83	213.2	213.3	98.3	57.7	101.9	75.3	100.1
83	213.3	213.4	85.5	45.6	110.9	80.5	98.2
83	213.4	213.5	99.8	63.6	114.4	80.4	107.1
83	213.5	213.6	86.8	63	118.6	97.1	102.7
83	213.6	213.7	111.5	113.8	153.7	115.5	132.6
83	213.7	213.8	140.2	125	120.5	88.6	130.4
83	213.8	213.9	125.5	98.8	117.2	87	121.3
83	213.9	214	157.8	114.7	136.2	88.4	147

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

FLEXIBLE PAVEMENT SURFACE TOLERANCE

Project 4-083(103)203 – PCN 18221

DESCRIPTION

This provision details the surface tolerance requirements, corrective actions, performance incentives, and contract price adjustments for flexible pavement.

CONSTRUCTION REQUIREMENTS

A. Applicable Areas and Exceptions.

The pavement smoothness will be determined by profiling the finished surface of the mainline pavement. All finished bituminous surfaces will be profiled with the following exceptions:

1. Bridge decks and/or approach slabs and 150 feet on either side.
2. Side roads and approaches.
3. Shoulders, ramps and gore areas.
4. At-grade railroad crossings and 150 feet on either side.
5. Beginning and end of the project and 50 feet on either side of these boundaries.
6. 50 feet from areas that are not receiving surfacing.
7. Where safety and roadway geometrics do not allow the proper operating speed for the profiler to collect data. These areas will be determined by the Engineer.

On surfaces exempt from the profile testing, the Engineer will determine the pavement smoothness in accordance with Section 430.04 K, “Tolerances”.

B. Profiler.

The Engineer will furnish and operate the data collection equipment. The smoothness of the final roadway surface profile will be measured and analyzed using the International Roughness Index (IRI) to the nearest 0.1 inch. The Engineer will use a Class 1 profiler meeting ASTM E 950.

C. Operation.

The Engineer will use lasers to collect the profile in each wheel path of each lane.

The Engineer will trace the profile at approximately 31 and 97 inches, measured from the left edge of the lane, as determined by the direction of traffic. Provide traffic control for 500 feet beyond the ends of the project to facilitate the collection of profile data.

The data will be marked and labeled at the beginning and end of each trace, and event markers as identified by the Engineer.

Each trace will be labeled showing:

- Project;
- Location;
- Lane;
- Date tested; and
- Operator's name.

The Engineer will not test the roadway between November 30 and May 15. The Engineer will not test when the ambient temperature is below 32°F, or while it is raining or under inclement weather conditions. The Engineer will test when the pavement is dry and at an agreed upon time between the Engineer and the Contractor.

Prepare the surface for profile collection to ensure a clean surface for accurate testing. The Engineer will collect the profile at the agreed upon time, regardless of the condition of the final surface.

After the final lift of pavement is complete, schedule a time for the profile to be collected. The Engineer will collect the profile within 5 working days after notification. Data will be collected and the results submitted to the contractor a maximum of 5 working days after the testing date.

If the final lift of pavement cannot be completed before November 30, the Engineer will collect data for all portions of the roadway that have the final lift in place. Profile data for the unfinished portion of the roadway will be collected after May 15 of the following year.

D. Evaluation.

A lot is defined as a 528 foot road segment, one lane wide The Engineer will include a partial lot less than or equal to 370.0 feet in the previous lot. The Engineer will treat a lot greater than 370.0 feet as an independent lot. The MRI will be determined by averaging the IRI values from the right and left wheel paths to the nearest 0.1 inch.

The Engineer will evaluate the data and the data will remain the property of the Department. The MRI data will be used to determine performance incentives, contract price adjustments, and the need for corrective action.

E. Corrective Actions.

Areas that would result in a contract price adjustment may be ground to a lower lot MRI. If grinding occurs and results in an MRI of less than 56.0, the Engineer will not apply a performance incentive to that lot. Lots with an initial MRI of 48.1 or less will receive a performance incentive based on the initial readings, before grinding.

Submit a detailed corrective action plan. Corrective action can include a mill and overlay or diamond grinding. Perform corrective action in accordance with the relevant specifications. If the corrective action includes diamond grinding, apply a fog coat to the ground areas.

Do not perform corrective actions until the Engineer has approved the corrective action plan.

Grind lots to a maximum MRI of 75.0 in /mile.

The Engineer will collect a second profile a maximum of 5 working days after the completion of corrective action. If additional corrective action is necessary, the Engineer will apply a liquidated damage of $1,500 per trip for each profile collected after the second profile.

Perform corrective action on surface irregularities that exceed the requirements of Section 430.04 K, “Tolerances”.

F. Grinding.

Use equipment that does not cause strain or damage to the underlying surface of the pavement. Do not cause excessive ravels, aggregate fractures, or disturbance of the joints.

Perform grinding in the longitudinal direction so grinding begins and ends at lines normal to the pavement centerline. Do not overlap more than 2 inches between passes and ensure the depth variance between adjacent passes is less than 1/8 inch. Feather the grinding at the beginning and end of each pass.

Grind high shoulders to provide drainage and safety.

Grind the full width of the lane and daylight grinding on the shoulder by performing a feather pass.

Grind a minimum length of 30 feet. Join grind sections if the distance between grind sections is less than 60 feet.

When grinding in areas with speeds less than 45 MPH, areas with curb and gutter, and areas adjacent to waterways continuously collect all slurry or residue resulting from the grinding operation. Dispose of the slurry or residue as specified in Section 107.17, “Removed Material”.

BASIS OF PAYMENT

A. Liquidated Damages.

If the project would be considered substantially complete, as specified in Section 108.07 B, “Failure to Complete within the Contract Time” and corrective action is required, the Engineer may suspend time charges and the assessment of liquidated damages for up to 21 calendar days after the contract time has expired. If the corrective action is not complete within 21 calendar days after the contract time has expired, the Engineer will restart time charges and will assess liquidated damages.

B. Ride Quality.

The Engineer will pay a performance incentive for ride quality based on Table 1.

Table 1
Ride Quality Performance Incentives

MRI Range	Performance Incentive per Lot
≤ 34.0	$300
34.1 to 39.0	$225
39.1 to 44.0	$150
44.1 to 48.0	$75
48.1 to 56.0	$0

The Engineer will process contract price adjustments for ride quality based on Table 2.

Table 2
Ride Quality Contract Price Adjustments

MRI Range	Contract Price Adjustment per Lot
48.1 to 56.0	$0
56.1 to 62.0	($100)
62.1 to 69.0	($200)
69.1 to 75.0	($400)
75.1 ≥	Corrective Action

C. MISCELLANEOUS

Include costs necessary to prepare the roadway for testing in the contract unit price for asphalt pavement items.

Traffic control items, including flagging and pilot cars will be paid for according to Section 109.03, “Compensation for Contract Revisions”.

IRI DATA FOR PCN 18221 PROJECT NO. SOIB-4-083(103)203							
Hwy 83, Southbound Survey Data Collection Date = 10/19/2015							
HWY	Start-Mi	End-Mi	IRI_ Left Wheel Path	Standard Deviation	IRI_Right Wheel Path	Standard Deviation	IRI_Average
83	203.8	203.9	180.8	284.2	221.1	371.7	200.9
83	203.9	204	74.5	38.6	80.9	52.5	77.7
83	204	204.1	83.3	59.3	78.2	52.6	80.8
83	204.1	204.2	70.1	38	74.6	52.8	72.4
83	204.2	204.3	85.8	60.2	80.3	63.8	83
83	204.3	204.4	92.5	67.9	78.8	52	85.7
83	204.4	204.5	81.4	58.6	72.2	50.8	76.8
83	204.5	204.6	80.5	48.1	75	61.3	77.8
83	204.6	204.7	87.6	67.3	95.9	61	91.8
83	204.7	204.8	72.5	42.7	75.5	51	74
83	204.8	204.9	102.6	67	91	73.8	96.8
83	204.9	205	66.5	40.6	82.6	66.4	74.5
83	205	205.1	94	64.6	84.3	55	89.1
83	205.1	205.2	80.4	43.3	111.2	61.6	95.8
83	205.2	205.3	87.3	53.2	63.7	42.4	75.5
83	205.3	205.4	69.7	41.4	69.4	38.6	69.6
83	205.4	205.5	72.6	37.3	82.7	42.5	77.7
83	205.5	205.6	64.8	37.7	70.9	44.8	67.8
83	205.6	205.7	67.5	31.3	70.3	36.5	68.9
83	205.7	205.8	166	148.2	151.9	137	159
83	205.8	205.9	77.9	46.7	78.1	62.2	78
83	205.9	206	68.5	49.7	81.5	65.5	75
83	206	206.1	72.7	61.2	71	70.4	71.8
83	206.1	206.2	76.7	51.5	80.1	82.7	78.4
83	206.2	206.3	88.5	74.4	91.1	68.8	89.8
83	206.3	206.4	72.2	47.5	80.1	67.7	76.1
83	206.4	206.5	73.6	52.2	84.3	75.2	79
83	206.5	206.6	73.5	64.6	86.9	78.7	80.2
83	206.6	206.7	64.5	45.4	70.5	48.8	67.5
83	206.7	206.8	77	41.7	76.5	45.2	76.7
83	206.8	206.9	77	49.8	73	56.8	75
83	206.9	207	69.5	49.3	87.7	73.4	78.6
83	207	207.1	115.1	70	138.6	100.5	126.8
83	207.1	207.2	77.9	31.4	104.8	45.9	91.4
83	207.2	207.3	69.5	29.1	77.1	34.4	73.3
83	207.3	207.4	84.9	37.1	94.5	39.2	89.7
83	207.4	207.5	68.6	29.8	76.2	32.9	72.4

IRI DATA FOR PCN 18221 PROJECT NO. SOIB-4-083(103)203							
Hwy 83, Southbound Survey Data Collection Date = 10/19/2015							
HWY	Start-Mi	End-Mi	IRI_ Left Wheel Path	Standard Deviation	IRI_Right Wheel Path	Standard Deviation	IRI_Average
83	207.5	207.6	75.5	30.7	82.5	35.8	79
83	207.6	207.7	107.9	71.7	137.8	99.6	122.8
83	207.7	207.8	61.8	39.2	68.5	51.8	65.2
83	207.8	207.9	80.9	50.3	83.9	44.2	82.4
83	207.9	208	80.6	55.1	85.8	50.4	83.2
83	208	208.1	69.8	53.9	67.4	46.8	68.6
83	208.1	208.2	77.2	68	75.6	60.2	76.4
83	208.2	208.3	72	53.8	81.8	63.4	76.9
83	208.3	208.4	77.6	43.5	82.6	50.5	80.1
83	208.4	208.5	72.4	41.4	76.4	50.6	74.4
83	208.5	208.6	74.2	51.4	70.7	50.2	72.4
83	208.6	208.7	74.3	43.8	68.3	41.4	71.3
83	208.7	208.8	70.7	38.4	72.7	42.8	71.7
83	208.8	208.9	77.2	46.1	88.1	55.2	82.7
83	208.9	209	81.2	49.7	80.5	65.8	80.9
83	209	209.1	80.9	56	108.8	83.7	94.9
83	209.1	209.2	77.2	53.9	97.4	74.3	87.3
83	209.2	209.3	89.2	65.3	94.2	69.8	91.7
83	209.3	209.4	83.7	42.1	85.8	56.8	84.8
83	209.4	209.5	75.5	45.7	72	57.3	73.8
83	209.5	209.6	79.7	36.5	79.1	42.8	79.4
83	209.6	209.7	116.2	87.3	119.8	58.7	118
83	209.7	209.8	96	69.9	91.6	68.9	93.8
83	209.8	209.9	81.9	48	83.2	52.4	82.5
83	209.9	210	114.6	57.6	132.5	96.1	123.5
83	210	210.1	96.5	60.2	79	36.2	87.7
83	210.1	210.2	76.9	35.2	69.3	44.7	73.1
83	210.2	210.3	101.6	49.4	95	63.5	98.3
83	210.3	210.4	84.5	46.2	90.4	36.1	87.4
83	210.4	210.5	83.9	33.7	60.4	29.5	72.2
83	210.5	210.6	101.8	57	110.9	62.7	106.3
83	210.6	210.7	87	65.7	103.8	71.1	95.4
83	210.7	210.8	108.5	89.9	110.9	91.7	109.7
83	210.8	210.9	105.7	57.6	98.8	56.9	102.2
83	210.9	211	141.9	108.4	95.1	49.9	118.5
83	211	211.1	86.6	60.9	82.8	56.2	84.7
83	211.1	211.2	86.2	63.9	116.5	85.9	101.4

IRI DATA FOR PCN 18221 PROJECT NO. SOIB-4-083(103)203							
Hwy 83, Southbound Survey Data Collection Date = 10/19/2015							
HWY	Start-Mi	End-Mi	IRI_ Left Wheel Path	Standard Deviation	IRI_Right Wheel Path	Standard Deviation	IRI_Average
83	211.2	211.3	83.4	47.3	113.4	68.5	98.4
83	211.3	211.4	78.3	46.8	85.8	60.6	82.1
83	211.4	211.5	75.7	40.5	73.1	42.2	74.4
83	211.5	211.6	83.1	47.8	79.8	41.7	81.4
83	211.6	211.7	80.9	36.5	90.9	46.6	85.9
83	211.7	211.8	78.3	37.9	69.9	30.6	74.1
83	211.8	211.9	84	45.8	95	52.4	89.5
83	211.9	212	151.4	69.8	149.8	74.8	150.6
83	212	212.1	138.3	58.8	151.4	78.9	144.9
83	212.1	212.2	93	61.4	93	46.9	93
83	212.2	212.3	76.2	38.7	73.4	32.2	74.8
83	212.3	212.4	75.9	49.6	69.9	44.4	72.9
83	212.4	212.5	87.6	64.3	84.4	60	86
83	212.5	212.6	171.9	99.6	97.1	56.2	134.5
83	212.6	212.7	114	73.3	113	63.9	113.5
83	212.7	212.8	84.3	63.8	82.5	51.2	83.4
83	212.8	212.9	75.9	41.4	70	37.8	72.9
83	212.9	213	64	28.2	67.1	37.3	65.5
83	213	213.1	87.8	50.2	87.4	55.9	87.6
83	213.1	213.2	131.8	78.9	98.3	56.6	115.1
83	213.2	213.3	211.8	196.4	123.5	104.4	167.7
83	213.3	213.4	208.7	220.9	101.3	103.8	155
83	213.4	213.5	177.4	146.3	104.1	93.5	140.7
83	213.5	213.6	155.6	126.6	94.9	81.9	125.3
83	213.6	213.7	191.2	139.6	84	57	137.6
83	213.7	213.8	153.9	110.8	130.2	87.7	142.1

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION

FUEL COST ADJUSTMENT CLAUSE
Revision Date: 9/8/2006

Introduction

This Special Provision provides for price adjustments to the Contract when significant changes in the cost of motor fuels and burner fuels occur while completing the Contract work. Participation in fuel cost adjustment program is not mandatory. A Contractor is not required to notify the Department at the time of submitting bids whether the Contractor will or will not participate in the fuel cost adjustment provision.

The North Dakota Department of Transportation (NDDOT) will send the low responsible bidder a "Fuel Cost Adjustment Affidavit" (SFN 58393) with the proposed Contract. The Contractor shall return a completed Fuel Adjustment Affidavit with the signed Contract as specified in Standard Specification Section 103.06, Execution and Approval of the Contract. The affidavit shall be returned on all Contracts with this provision even if the Contractor elects not to participate in the provision.

Compensation adjustments for motor fuels and burner fuels consumed in prosecuting the Contract shall be determined by the Engineer in accordance with the provisions set forth herein. Compensation adjustments will be assessed monthly for the cost of the motor fuels and burner fuels whenever the Current Fuel Index (CFI) is outside the given threshold of the Base Fuel Index (BFI) for the Contract.

If the Contractor has a fixed price for fuel for motor or burner fuels to complete the work, no fuel cost adjustments will be made for that fuel type. If there is no fixed fuel price for motor or burner fuels, participation in the Fuel Adjustment provision is the decision of the prime Contractor.

If the prime Contractor decides not to participate, no fuel cost adjustments will be made to the Contract for the Contractor or any subcontractors. If the prime Contractor elects to participate in the fuel cost adjustment provision, the prime Contractor shall include the anticipated fuel cost of subcontractors who wish to participate. If fuel cost adjustments are made to the Contract, the prime Contractor shall ensure that participating subcontractors including second and lower tier, are included in the adjustments in proportion to the percentage of work and anticipated fuel cost by that subcontractor.

Fuel Indexes

Each month, NDDOT will record the average wholesale price for No. 2 diesel fuel and the average wholesale price for unleaded gasoline (87 octane). The monthly average will be the average of the daily rack prices for the month as reported by DTN Energy for Fargo ND.

The burner fuel index will be the No. 2 diesel fuel index regardless of the type of burner fuel actually used.

The Base Fuel Index (BFI) price for motor fuels and burner fuel to be used in the Contract will be the average wholesale price for the month prior to the bid opening.

The Current Fuel Index (CFI) price for motor fuels and burner fuel to be used for each monthly adjustment will be the average wholesale price for the month prior to the adjustment month.

Fuel Ratio

For motor fuels diesel and unleaded gas, the fuel ratio of the Contract will be determined by dividing the Contractor's affidavit costs for each motor fuel by the original Contract amount.

For burner fuels, the fuel ratio of the contract will be determined by dividing the Contractor's affidavit cost for burner fuels by the original Contract amount of plant-mixed hot bituminous pavement paid by the ton. Asphalt cement, binders and other miscellaneous bituminous items shall not be included.

The fuel ratio of the contract for motor and burner fuels will remain the same throughout the length of the contract. The sum of the affidavit fuel costs shall not exceed 15% of the original Contract amount.

The fuel ratio for the three fuel types will be determined by the following equation:

$$\textbf{Fuel Ratio}_{(x, y, z)} = \textbf{Affidavit Cost}_{(x, y, z)} / \textbf{Original Contract Amount}_{(x, y, z)}$$

(x)	=	Motor Fuel (Diesel)
(y)	=	Motor Fuel (Unleaded)
(z)	=	Burner Fuel
$\text{Fuel Ratio}_{(x, y, z)}$	=	Fuel ratio of the contract for each respective fuel type
$\text{Affidavit Cost}_{(x, y, z)}$	=	Fuel costs from Fuel Adjustment Affidavit (SFN 58393)
$\text{Original Contract Amount}_{(x, y)}$	=	Total of the original contract amount excluding lane rental, and Part B of the bid (when A+B bidding is used), if applicable.
$\text{Original Contract Amount}_{(z)}$	=	Total original contract amount for all hot bituminous pavement bid items combined, excluding bid items for asphalt cement, sawing and sealing joints, coring, etc. Only hot bituminous pavement bid items measured by the Ton will be included in the calculation.

Cost Change

The monthly change in fuel costs will be determined by the following equation:

$$\textbf{Cost Change}_{(x, y, z)} = (\textbf{CFI}_{(x, y, z)} - \textbf{BFI}_{(x, y, z)}) / \textbf{BFI}_{(x, y, z)}$$

(x)	=	Motor Fuel (Diesel)
(y)	=	Motor Fuel (Unleaded)
(z)	=	Burner Fuel (use diesel prices)
$\text{Cost Change}_{(x, y, z)}$	=	The relative change in the current CFI and the BFI for each fuel type
$\text{CFI}_{(x, y, z)}$	=	Current Fuel Index for each fuel type
$\text{BFI}_{(x, y, z)}$	=	Base Fuel Index for each fuel type

Contract Adjustments

Contract adjustments will be made for the cost of motor and burner fuels whenever the cost change exceeds a ±0.10 threshold. No fuel cost adjustment will be made for work done under liquidated damages. Adjustments will be determined for Motor Fuel (diesel), Motor Fuel (unleaded), and Burner Fuel (burner) separately and shall be computed on a monthly basis.

When the cost change is greater than 0.10, the rebate to the Contractor for each fuel type shall be computed according to the following formulas:

$$\mathbf{FCA_{(x,\,y,\,z)} = Fuel\ Ratio_{(x,\,y,\,z)} \times Estimate_{(x,\,y,\,z)} \times (Cost\ Change_{(x,\,y,\,z)} - 0.10)}$$

(x)	=	Motor Fuel (Diesel)
(y)	=	Motor Fuel (Unleaded)
(z)	=	Burner Fuel
$FCA_{(x,\,y,\,z)}$	=	Fuel Cost Adjustment for each of the fuel types
$Fuel\ Ratio_{(x,\,y,\,z)}$	=	Fuel Ratio for each of the fuel types
$Estimate_{(x,\,y)}$	=	The monthly total of work done on estimates issued in the current month excluding incentive or disincentive payments, pay factor adjustments and any work completed under liquidated damages.
$Estimate_{(z)}$	=	The monthly total of hot bituminous pavement work done on estimates issued in the current month, excluding bid items for asphalt cement, sawing and sealing joints, coring, etc. Only hot bituminous pavement bid items measured by the Ton will be included in the calculation. Hot bituminous pavement work completed under liquidated damages will not be included.
$Cost\ Change_{(x,\,y,\,z)}$	=	The monthly change in fuel costs for each of the fuel types

When the cost change is less than -0.10, the credit to the Department for each fuel type shall be computed according to the following formulas:

$$\mathbf{FCA_{(x,\,y,\,z)} = Fuel\ Ratio_{(x,\,y,\,z)} \times Estimate_{(x,\,y,\,z)} \times (Cost\ Change_{(x,\,y,\,z)} + 0.10)}$$

(x)	=	Motor Fuel (Diesel)
(y)	=	Motor Fuel (Unleaded)
(z)	=	Burner Fuel
$FCA_{(x,\,y,\,z)}$	=	Fuel Cost Adjustment for each of the fuel types
$Fuel\ Ratio_{(x,\,y,\,z)}$	=	Fuel Ratio for each of the fuel types
$Estimate_{(x,\,y)}$	=	The monthly total of work done on estimates issued in the current month excluding any incentive or disincentive payments, pay factor adjustments and any work completed under liquidated damages.
$Estimate_{(z)}$	=	The monthly total of hot bituminous pavement work done on estimates issued in the current month, excluding bid items for asphalt cement, sawing and sealing joints, coring, etc. Only hot bituminous pavement bid items measured by the Ton will be included in the calculation. Hot bituminous pavement work completed under liquidated damages will not be included.
$Cost\ Change_{(x,\,y,\,z)}$	=	The monthly change in fuel costs for each of the fuel types

Payments

Adjustments will be determined by the Engineer monthly. Adjustments will be made under the following spec and code for each fuel type:

109 0100	Motor Fuels (Diesel)
109 0200	Motor Fuels (Unleaded)
109 0300	Burner Fuel

When significant payment adjustments are made on final estimates to account for final in-place measured quantities, the Engineer may prorate the adjustments back to the months when the work was done.

Attachments

For informational purposes, a ‘Fuel Cost Adjustment Affidavit’ (SFN 58393) is included as Attachment A.

FUEL COST ADJUSTMENT AFFIDAVIT

North Dakota Department of Transportation, Construction Services
SFN 58393 (08-2006)

Attachment A

Project Number

The Contractor is not required to notify the Department at the time of submitting bids whether he will or will not participate in the fuel cost adjustment program. The Contractor shall return the affidavit on all Contracts with this Provision even if the Contractor elects not to participate.

Check the box for each fuel type that has a fixed price.
No adjustments in fuel price will be made for the boxes that are checked.

☐ Diesel ☐ Unleaded ☐ Burner Fuel

Does your company elect to participate in a fuel adjustment for this contract for the fuels that do not have a fixed price?
No adjustments in fuel prices will be made if **No** is checked.

☐ Yes ☐ No

If yes, provide the total dollars for each of the applicable fuels.

Diesel (x)	$		
Unleaded (y)	$		
Burner Fuel (z)	$		
Sum (x+y+z)	$	% of Original Contract Amount	%*

*The sum of the x, y, and z may not exceed 15% of the original contract amount.

Under the penalty of law for perjury of falsification, the undersigned,

_____, _____
Name Title

of _____, here by certifies that the documentation is submitted in good
Contractor

faith, that the information provided is accurate and complete to the best of their knowledge and belief, and that the monetary amount identified accurately reflects the cost for fuel, and that they are duly authorized to certify the above documentation on behalf of the company.

I hereby agree that the Department or its authorized representative shall have the right to examine and copy all Contractor records, documents, work sheets, bid sheets and other data pertinent to the justification of the fuel costs shown above.

_____ **X** _____
Date Signed

State of _____

County of _____

Subscribed and sworn to before me this _____ day of _____, _____.

(Seal)

X _____
Signature of Notary Public

My Commission Expires _____